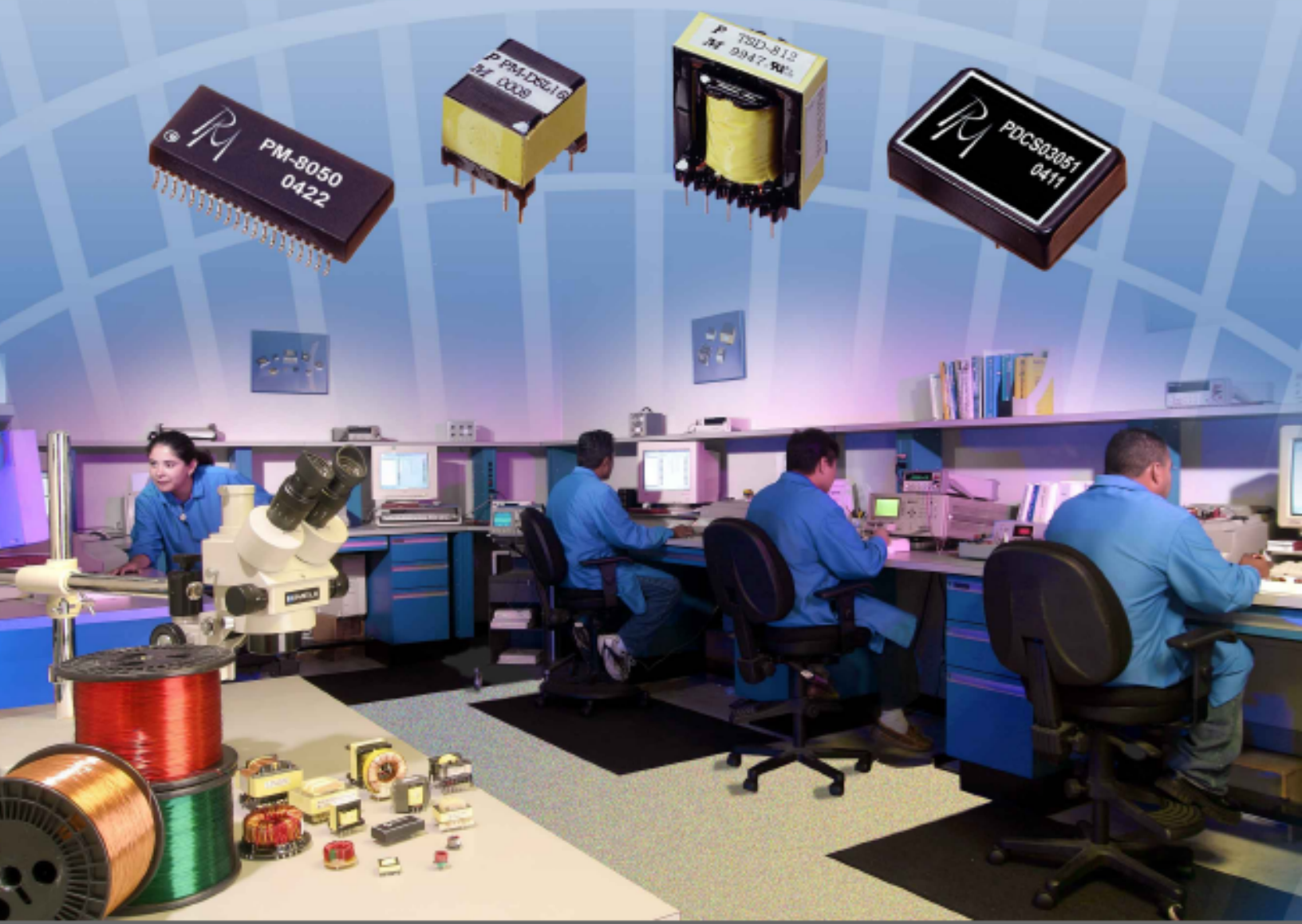


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Products Catalog

Table Of Contents

DATABUS INTERFACE TRANSFORMER

Page

MIL-STD-1533 / MIL-T-21038 DataBus Interface Transformer	pm-dbxxx	2-9	<i>New</i>
--	----------	-----	------------

AUDIO

Digital Audio Data Transmission	pm-adxxxx	10	<i>New</i>
---------------------------------------	-----------	----	------------

NETWORKING & COMMUNICATION

DSL Line Isolation Transformers Thru Hole or SMD, UL/CSA Recognized	pm-dslxxx	11-21	
Coupled Inductor For Uses in ADSL Pots Low Pass Filters	pm-indxxx	22-23	
T1/E1/ISDN-PRI 3KV-Reinforced SMD Transformers	pmt10xx	24	
T1/E1/ISDN-PRI 3KV-Reinforced Thru Hole Transformers	pmis3xxx	25-26	
T1/E1 Dual Core SMD Isolation Transformers, SOIC Package	pmis2_7x	27-28	
T1/E1/ISDN-PRI 1.5KV Dual Core SMD Isolation Transformers	pmis8_9x	29-30	
T1/E1 Quad Port SMD Isolation Transformers	pm-81_82	31-33	
T1/E1/ISDN-PRI Quad Port SMD Transformers with IC Side Protection	pm-86xx	34	<i>New</i>
T3/DS3/E3/STS-1 Interface Isolation Transformers	pmt3	35-37	
10 Base-T Dual Interface Modules Transformers & Filters	pmbt	38-46	
10/100 Base-TX Quad Port Isolation Transformers with Filters	pm-80xx	47-51	
10/100 Base-T Small Outline Isolation Transformers, SOIC Package	pm-10_30	52-55	
10/100 Base-TX Single Port SOIC Transformers	pm-61xx	56	
10/100 Base-TX PC Card LAN & Cardbus Applications	pm-6xxx	57-61	<i>New</i>
1000 Base-T Module Isolation Transformers with Filters	pm-9xxx	62-63	<i>New</i>
Coupling Transformers for Networking & General Purpose	pmnw	64-65	
Signal Line Filters/Common Mode Chokes, to 500 MH.....	pm-sfxx	66-68	
Signal Line Filters/Common Mode Chokes, to 1 GHz.....	pm-sfxxx	69-71	<i>New</i>
High Speed Voice/Data Coupling Transformers	pm-mc	72-74	

FIBRE CHANNEL

Wideband RF Pulse Coupling Transformers	pm-wt&wg	75	
Fibre Channel Coupling Transformers, Cypress "HOTLink".....	pm-wt&wg	76	



Products Catalog

Table Of Contents (continue)

POWER PRODUCTS

Page

SWITCH MODE

Current Sense Inductors, With Center Hole	pm-ci	77-78	
Current Sense Transformers	pm-cs	79	
DC/DC Power Conversion For Linear Technology	pmsm	80-82	
DC/DC Push-Pull Power Conversion For Linear Technology	pmsm15	83	
Low Cost Toroidal Power Inductors	vtp	84-85	
Sendust Toroidal Power Inductors, High frequency, Low Loss	vtk	86-87	
Transformers, UL/CSA Recognized, "TOP", PWM Designs	pol	88-96	<i>New</i>
Transformers, UL/CSA Recognized, "TINY", PWM Designs	pony	97-99	
PMCE & PMCU EMI/RFI Common Mode AC Line Filters	pmce, pmcu	100-105	
Open Common Mode EMI Supression Inductors.....	pm-omxx	106	
VERSA-PAC Transformers 1:1:1:1:1, SMD	pm-vxxxxx	107-110	<i>New</i>
Gate & Base Drive Transformers, Single & Double Ended	pmgd	111-113	

LINEAR - 60 Hz, 115/230V

(*) Parts are UL & CSA Recognized

Split Bobbin High Isolation 1.1VA to 36 VA, 2500 V _{rm} (*)	psb	114-115	
Shrouded VDE Split Bobbin High Isolation, 2.5VA to 56VA, 4KV _{rms} (*)	pvb	116-117	
Low Profile Dual Bobbin, 2.5VA to 48VA, 1500 V _{rms}	plp	118-119	

TOROID - 60 Hz, 115V, 50-400 Hz or 115/230 Input

Designed to meet UL, CSA, VDE, 4000V _{rms}	pt-xxxx	120-121	<i>New</i>
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DC/DC CONVERTER MODULES

1.0 Watt Mini-SIP, 1000-3000V Isolation, Low Cost	s3_1watt	122-123	
2.0 Watt Mini-SIP, 500-1000V Isolation, Low Cost	s3_2watt, s4ax	124-125	
1.5 & 3.0 Watt DIL, 500V Isolation, Low Cost	b3as-ad	126-127	
1.0 & 2.5 Watt DIL, 500V Isolation, Low Cost.....	b2ax	128	
2.2 Watt 2:1 Wide Input Range High Efficiency	PDCx0307x ...	129-130	<i>New</i>
3.0 Watt 2:1 Wide Input Range High Efficiency	PDCx0300xx ..	131-133	
3.0 Watt 2:1 Wide Input Range High Efficiency Extended Temperature	PDCx0305x	134	
3.0 Watt 2:1 Wide Input Range High Efficiency With Remote On/Off Option ..	PDCx0302x	135-136	
3.0 Watt 4:1 Wide Input Range High Efficiency, Copper Case	PDCx0304x	137-138	
High Current Adjustable Output, ON/OFF Control, Efficiency to 94%	PDCx5-6xxx ...	139-140	<i>New</i>

Specifications subject to change without notice.

Unless otherwise specified, all tolerances are ± 0.010 (0.25)

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MIL-STD-1553 / MIL-PRF-21038

DATABUS INTERFACE TRANSFORMERS

LOW PROFILE SINGLE/DUAL

- ① Designed to Meet MIL-STD-1553 A/B & MIL-PRF-21038
- ② Common Mode Rejection (CMR) Greater Than 45dB
- ③ Impedance Test Frequency from 75Khz to 1MHz
- ④ Droop Less Than 20%
- ⑤ Overshoot & Ringing $\pm 1V$ Max
- ⑥ Pulse Width 2 μs

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -55°C TO +125°C

PART NUMBER	TERMINALS / RATIO ($\pm 3\%$)		TERMINALS / RATIO ($\pm 3\%$)		DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2701	1-3:4-8	1:1	1-3:5-7	1:1.707	1-3=3.0, 4-8=3.0	4000	1/A
PM-DB2701EX	1-3:4-8	1:1	1-3:5-7	1:1.707	1-3=3.0, 4-8=3.0	4000	1/G
PM-DB2702	1-3:4-8	1.4:1	1-3:5-7	2:1	1-3=3.5, 4-8=3.0	7200	1/A
PM-DB2703	1-3:4-8	1.25:1	1-3:5-7	1.66:1	1-3=3.2, 4-8=3.0	4000	1/A
PM-DB2704	4-8:1-3	2.3:1	5-7:1-3	3.2:1	1-3=1.2, 4-8=3.0	3000	4/A
PM-DB2705	1-2:4-3	1:1.41	---	---	1-2=2.2, 3-4=2.7	3000	3/C
PM-DB2705EX	1-2:3-4	1:1.41	---	---	1-2=2.2, 3-4=2.7	3000	5/C
PM-DB2706	1-5:6-2	1:1	---	---	1-5=2.5, 6-2=2.8	3000	2/B
PM-DB2707	1-5:6-2	1:1.41	---	---	1-5=2.2, 6-2=2.7	3000	2/B
PM-DB2708	1-5:6-2	1:1.66	---	---	1-5=1.5, 6-2=2.4	3000	2/B
PM-DB2709	1-5:6-2	1:2	---	---	1-5=1.3, 6-2=2.6	3000	2/B
PM-DB2710	1-3:4-8	1:2.12	1-3:5-7	1:1.5	1-3=1.0, 4-8=3.5	4000	1/A
PM-DB2711	1-3:4-8	1:1	1-3:5-7	1:1.707	1-3=3.0, 4-8=3.0	4000	1/D
PM-DB2712	1-3:4-8	1.4:1	1-3:5-7	2.1:1	1-3=3.5, 4-8=3.0	7200	1/D
PM-DB2713	1-3:4-8	1.25:1	1-3:5-7	1.66:1	1-3=3.2, 4-8=3.0	4000	1/D
PM-DB2714	4-8:1-3	2.3:1	5-7:1-3	3.2:1	1-3=1.2, 4-8=3.0	3000	4/D
PM-DB2715	1-3:4-8	1:2.12	1-3:5-7	1:1.5	1-3=1.0, 4-8=3.5	4000	1/D
PM-DB2716	1-3:4-8	1:1	1-3:5-7	1:1.707	1-3=3.0, 4-8=3.0	4000	1/E
PM-DB2717	1-3:4-8	1.41:1	1-3:5-7	2:1	1-3=3.5, 4-8=3.0	7200	1/E
PM-DB2718	1-3:4-8	1.25:1	1-3:5-7	1.66:1	1-3=3.2, 4-8=3.0	4000	1/E
PM-DB2719	4-8:1-3	2.3:1	5-7:1-3	3.26:1	1-3=1.2, 4-8=3.0	3000	1/E
PM-DB2720	1-3:4-8	1:2.12	1-3:5-7	1:1.5	1-3=1.0, 4-8=3.5	3000	1/E
PM-DB2721	1-3:4-8	1:1	1-3:5-7	1:1.707	1-3=3.0, 4-8=3.0	4000	1/A
PM-DB2722	1-3:4-8	1.41:1	1-3:5-7	2:1	1-3=3.5, 4-8=3.0	7200	1/A
PM-DB2723	1-3:4-8	1.25:1	1-3:5-7	1.66:1	1-3=3.2, 4-8=3.0	4000	1/A
PM-DB2724	1-3:4-8	1:2.12	1-3:5-7	1:1.5	1-3=1.0, 4-8=3.5	4000	1/A
PM-DB2725	1-3:4-8	1:2.5	1-3:5-7	1:1.79	1-3=1.0, 4-8=3.5	4000	1/A
PM-DB2725EX	1-3:4-8	1:2.5	1-3:5-7	1:1.79	1-3=1.0, 4-8=3.5	4000	1/G
PM-DB2726	1-3:4-8	1:2.5	1-3:5-7	1:1.79	1-3=1.0, 4-8=3.5	4000	1/A
PM-DB2727	1-3:4-8	1:2.5	1-3:5-7	1:1.79	1-3=1.0, 4-8=3.5	4000	1/D
PM-DB2728	1-5:6-2	1:1.5	---	---	1-5=0.9, 6-2=2.5	3000	2/B
PM-DB2729	1-5:6-2	1:1.79	---	---	1-5=0.9, 6-2=2.5	3000	2/B
PM-DB2730	1-5:6-2	1:2.5	---	---	1-5=1.0, 6-2=2.8	3000	2/B
PM-DB2731	1-3:4-8	1:2.5	1-3:5-7	1:1.79	1-3=1.0, 4-8=3.5	4000	1/E
PM-DB2755	1-3:4-8	1:3.75	1-3:5-7	1:2.70	1-3=1.0, 4-8=4.0	4000	1/G
PM-DB2759 (1)	1-5:6-2	1:1.79	---	---	1-5=0.9, 6-2=2.5	3000	2/U
PM-DB2760 (1)	1-5:6-2	1:2.5	---	---	1-5=1.0, 6-2=2.8	3000	2/U

(1) OPERATING TEMPERATURE RANGE FROM -40C TO +130C



MIL-STD-1553 / MIL-PRF-21038

DATABUS INTERFACE TRANSFORMERS

LOW PROFILE SINGLE/DUAL

LOW PROFILE SINGLE RATIO HT= 0.155"

PART NUMBER	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2741	1-3:4-8 1:1	1-3:5-7 1:707	1-3=3.0, 4-8=3.0	4000	1/K
PM-DB2742	1-3:4-8 1.4:1	1-3:5-7 2:1	1-3=3.5, 4-8=3.0	7200	1/K
PM-DB2743	1-3:4-8 1.25:1	1-3:5-7 1.66:1	1-3=3.2, 4-8=3.0	4000	1/K
PM-DB2744	1-3:4-8 1:2.12	1-3:5-7 1:1.5	1-3=1.0, 4-8=3.5	4000	1/K
PM-DB2745	1-3:4-8 1:2.5	1-3:5-7 1:1.79	1-3=1.0, 4-8=3.5	4000	1/K

PART NUMBER	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2741L	1-3:4-8 1:1	1-3:5-7 1:707	1-3=3.0, 4-8=3.0	4000	1/L
PM-DB2742L	1-3:4-8 1.4:1	1-3:5-7 2:1	1-3=3.5, 4-8=3.0	7200	1/L
PM-DB2743L	1-3:4-8 1.25:1	1-3:5-7 1.66:1	1-3=3.2, 4-8=3.0	4000	1/L
PM-DB2744L	1-3:4-8 1:2.12	1-3:5-7 1:1.5	1-3=1.0, 4-8=3.5	4000	1/L
PM-DB2745L	1-3:4-8 1:2.5	1-3:5-7 1:1.79	1-3=1.0, 4-8=3.5	4000	1/L

PART NUMBER	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2741M	1-3:4-8 1:1	1-3:5-7 1:707	1-3=3.0, 4-8=3.0	4000	1/M
PM-DB2742M	1-3:4-8 1.4:1	1-3:5-7 2:1	1-3=3.5, 4-8=3.0	7200	1/M
PM-DB2743M	1-3:4-8 1.25:1	1-3:5-7 1.66:1	1-3=3.2, 4-8=3.0	4000	1/M
PM-DB2744M	1-3:4-8 1:2.12	1-3:5-7 1:1.5	1-3=1.0, 4-8=3.5	4000	1/M
PM-DB2745M	1-3:4-8 1:2.5	1-3:5-7 1:1.79	1-3=1.0, 4-8=3.5	4000	1/M

PART NUMBER	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2741N	1-3:4-8 1:1	1-3:5-7 1:707	1-3=3.0, 4-8=3.0	4000	1/N
PM-DB2742N	1-3:4-8 1.4:1	1-3:5-7 2:1	1-3=3.5, 4-8=3.0	7200	1/N
PM-DB2743N	1-3:4-8 1.25:1	1-3:5-7 1.66:1	1-3=3.2, 4-8=3.0	4000	1/N
PM-DB2744N	1-3:4-8 1:2.12	1-3:5-7 1:1.5	1-3=1.0, 4-8=3.5	4000	1/N
PM-DB2745N	1-3:4-8 1:2.5	1-3:5-7 1:1.79	1-3=1.0, 4-8=3.5	4000	1/N

Specifications subject to change without notice.

pm-dbxxx 02/05/03

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MIL-STD-1553 / MIL-PRF-21038

DATABUS INTERFACE TRANSFORMERS

LOW PROFILE SINGLE/DUAL

LOW PROFILE DUAL RATIO HT= 0.155"

PART NUMBER	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE	
PM-DB2741D	1-3:16-13	1:1	1-3:15-14	1:1.707	1-3=3.0, 16-13=3.0	4000	6/R
	5-7:12-9	1:1	5-7:11-10	1:1.707	5-7=3.0, 12-9=3.0	4000	
PM-DB2742D	1-3:16-13	1.4:1	1-3:15-14	2:1	1-3=3.5, 16-13=3.0	7200	6/R
	5-7:12-9	1.4:1	5-7:11-10	2:1	5-7=3.5, 12-9=3.0	7200	
PM-DB2743D	1-3:16-13	1.25:1	1-3:15-14	1.66:1	1-3=3.2, 16-13=3.0	4000	6/R
	5-7:12-9	1.25:1	5-7:11-10	1.66:1	5-7=3.2, 12-9=3.0	4000	
PM-DB2744D	1-3:16-13	1:2.12	1-3:15-14	1:1.5	1-3=1.0, 16-13=3.1	4000	6/R
	5-7:12-9	1:2.12	5-7:11-10	1:1.5	5-7=1.0, 12-9=3.1	4000	
PM-DB2745D	1-3:16-13	1:2.5	1-3:15-14	1:1.79	1-3=1.0, 16-13=3.5	4000	6/R
	5-7:12-9	1:2.5	5-7:11-10	1:1.79	5-7=1.0, 12-9=3.5	4000	

PART NUMBER	TERMINALS / RATIO (± 3%)		TERMINALS / RATIO (± 3%)		DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2741S	1-3:16-13	1:1	1-3:15-14	1:1.707	1-3=3.0, 16-13=3.0	4000	6/S
	5-7:12-9	1:1	5-7:11-10	1:1.707	5-7=3.0, 12-9=3.0	4000	
PM-DB2742S	1-3:16-13	1.4:1	1-3:15-14	2:1	1-3=3.5, 16-13=3.0	7200	6/S
	5-7:12-9	1.4:1	5-7:11-10	2:1	5-7=3.5, 12-9=3.0	7200	
PM-DB2743S	1-3:16-13	1.25:1	1-3:15-14	1.66:1	1-3=3.2, 16-13=3.0	4000	6/S
	5-7:12-9	1.25:1	5-7:11-10	1.66:1	5-7=3.2, 12-9=3.0	4000	
PM-DB2744S	1-3:16-13	1:2.12	1-3:15-14	1:1.5	1-3=1.0, 16-13=3.1	4000	6/S
	5-7:12-9	1:2.12	5-7:11-10	1:1.5	5-7=1.0, 12-9=3.1	4000	
PM-DB2745S	1-3:16-13	1:2.5	1-3:15-14	1:1.79	1-3=1.0, 16-13=3.5	4000	6/S
	5-7:12-9	1:2.5	5-7:11-10	1:1.79	5-7=1.0, 12-9=3.5	4000	



MIL-STD-1553 / MIL-PRF-21038 DATABUS INTERFACE TRANSFORMERS LOW PROFILE SINGLE/DUAL

LOW PROFILE DUAL RATIO HT= 0.155"

PART NUMBER	TERMINALS / RATIO (± 3%)	TERMINALS / RATIO (± 3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB2741T	1-3:16-13 1:1	1-3:15-14 1:1.707	1-3=3.0, 16-13=3.0	4000	6/T
	5-7:12-9 1:1	5-7:11-10 1:1.707	5-7=3.0, 12-9=3.0	4000	
PM-DB2742T	1-3:16-13 1.4:1	1-3:15-14 2:1	1-3=3.5, 16-13=3.0	7200	6/T
	5-7:12-9 1.4:1	5-7:11-10 2:1	5-7=3.5, 12-9=3.0	7200	
PM-DB2743T	1-3:16-13 1.25:1	1-3:15-14 1.66:1	1-3=3.2, 16-13=3.0	4000	6/T
	5-7:12-9 1.25:1	5-7:11-10 1.66:1	5-7=3.2, 12-9=3.0	4000	
PM-DB2744T	1-3:16-13 1:2.12	1-3:15-14 1:1.5	1-3=1.0, 16-13=3.1	4000	6/T
	5-7:12-9 1:2.12	5-7:11-10 1:1.5	5-7=1.0, 12-9=3.1	4000	
PM-DB2745T	1-3:16-13 1:2.5	1-3:15-14 1:1.79	1-3=1.0, 16-13=3.5	4000	6/T
	5-7:12-9 1:2.5	5-7:11-10 1:1.79	5-7=1.0, 12-9=3.5	4000	

DUAL RATIO HT= 0.250"

PART NUMBER	TERMINALS / RATIO (±3%)	TERMINALS / RATIO (±3%)	DCR (Ohms Max.)	IMPEDANCE (Ohms MIN.)	SCHEMATICS / PACKAGE
PM-DB27401	1-3:4-8 2:5	1-3:5-7 4:7	1-3=3.5 11-13=3.5	3000	7/H
	11-13:14-18 2:5	11-13:15-17 4:7	4-8=3.0 14-18=3.0	3000	
PM-DB27402	1-3:4-8 1:0.83	1-3:5-7 1:0.6	1-3=3.0 11-13=3.0	3000	7/H
	11-13:14-18 1:0.83	11-13:15-17 1:0.6	4-8=3.0 14-18=3.0	3000	
PM-DB27403	1-3:4-8 1.4:1	1-3:5-7 2:1	1-3=3.5 11-13=3.5	7200	7/H
	11-13:14-18 1.4:1	11-13:15-17 2:1	4-8=3.0 14-18=3.0	7200	
PM-DB27404	1-3:4-8 1:1	1-3:5-7 1:0.707	1-3=3.0 11-13=3.0	4000	7/H
	11-13:14-18 1:1	11-13:15-17 1:0.707	4-8=3.0 14-18=3.0	4000	
PM-DB27405	1-3:4-8 1.25:1	1-3:5-7 1.66:1	1-3=3.2 11-13=3.2	4000	7/H
	11-13:14-18 1.25:1	11-13:15-17 1.66:1	4-8=3.0 14-18=3.0	4000	
PM-DB27406	4-8:1-3 2.3:1	5-7:1-3 3.2:1	1-3=1.2 11-13=1.2	3000	8/H
	14-18:11-13 2.3:1	15-17:11-13 3.2:1	5-7=3.0 15-17=3.0	3000	
PM-DB27407	4-8:1-3 2.12:1	5-7:1-3 1.5:1	1-3=1.1 11-13=1.1	4000	7/H
	14-18:11-13 2.12:1	15-17:11-13 1.5:1	4-8=3.0 14-18=3.0	4000	
PM-DB27408	1-3:4-8 1:2.5	1-3:5-7 1:1.79	1-3=1.0 11-13=1.0	4000	7/H
	11-13:14-18 1:2.5	11-13:15-17 1:1.79	4-8=3.5 14-18=3.5	4000	

Specifications subject to change without notice.

pm-dbxxx 02/05/03

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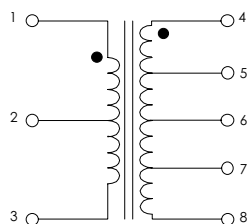
MIL-STD-1553 / MIL-PRF-21038

DATABUS INTERFACE TRANSFORMERS

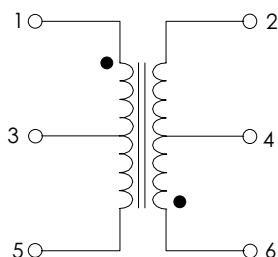
LOW PROFILE SINGLE/DUAL

SCHEMATICS

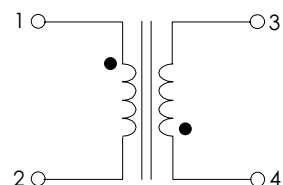
SCHEMATIC "1"



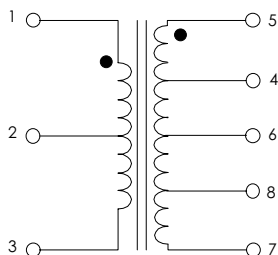
SCHEMATIC "2"



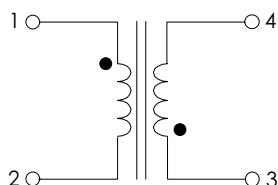
SCHEMATIC "3"



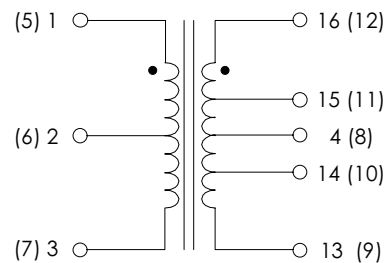
SCHEMATIC "4"



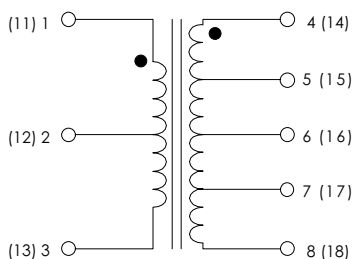
SCHEMATIC "5"



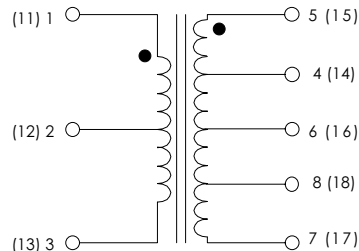
SCHEMATIC "6"



SCHEMATIC "7"



SCHEMATIC "8"



MIL-STD-1553 / MIL-PRF-21038

DATABUS INTERFACE TRANSFORMERS

LOW PROFILE SINGLE/DUAL

FIGURE #A

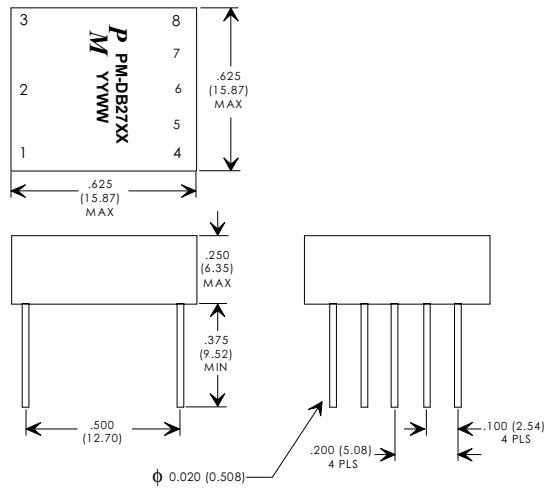


FIGURE #B

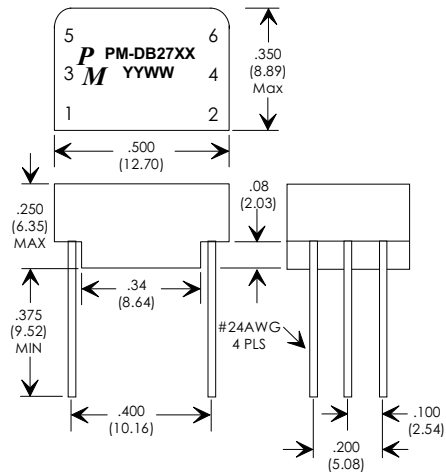


FIGURE #C

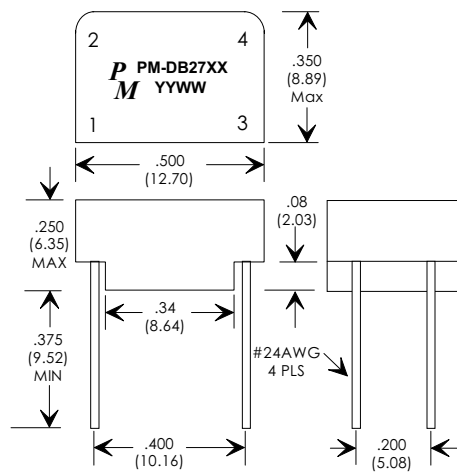


FIGURE #D

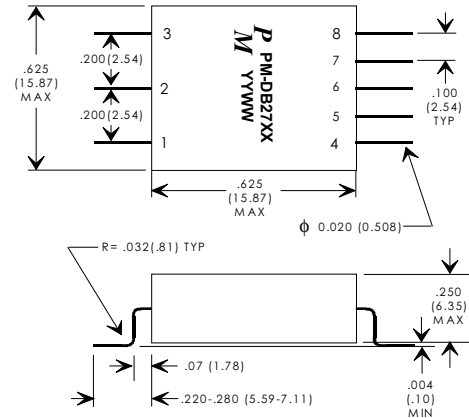


FIGURE #E

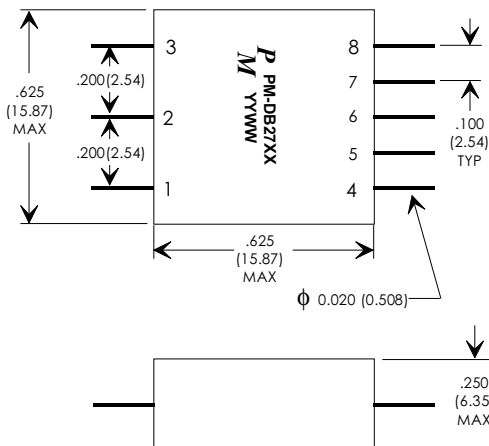
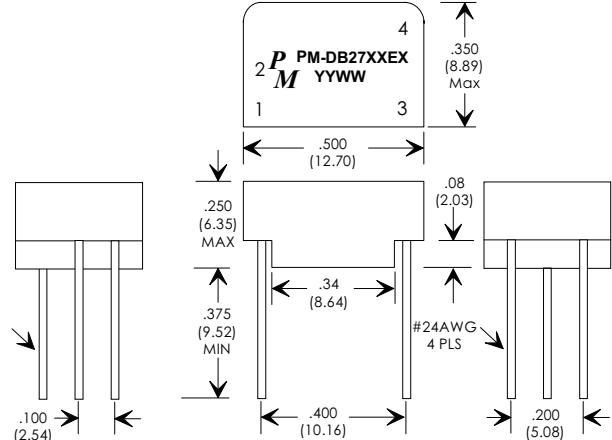


FIGURE #F



MIL-STD-1553 / MIL-PRF-21038

DATABUS INTERFACE TRANSFORMERS

LOW PROFILE SINGLE/DUAL

FIGURE #G

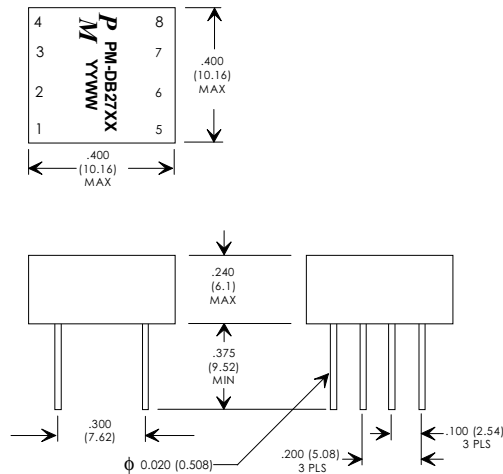


FIGURE #H

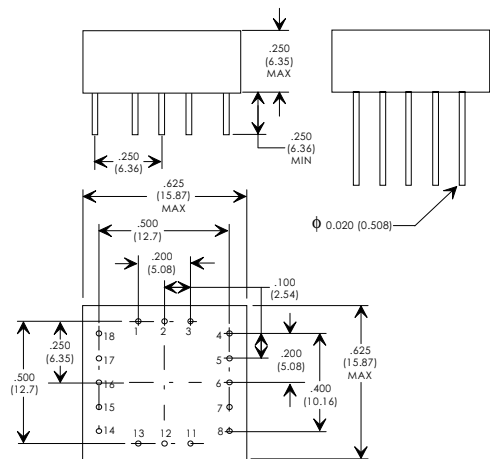


FIGURE #K

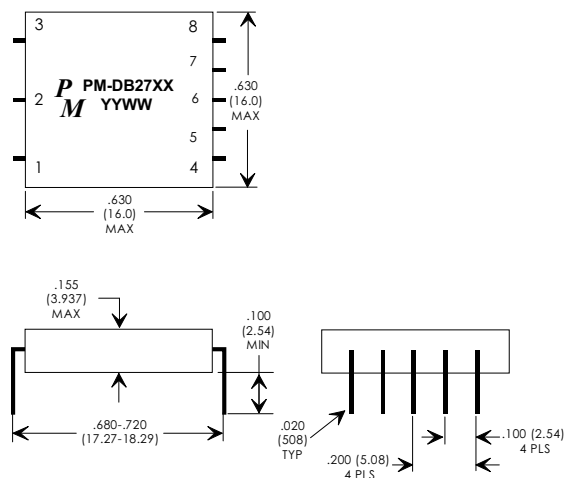


FIGURE #L

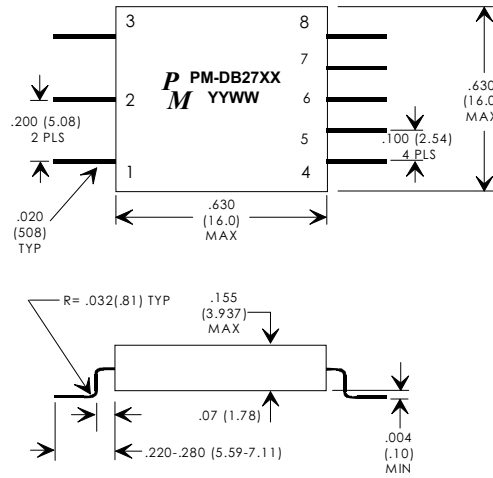


FIGURE #M

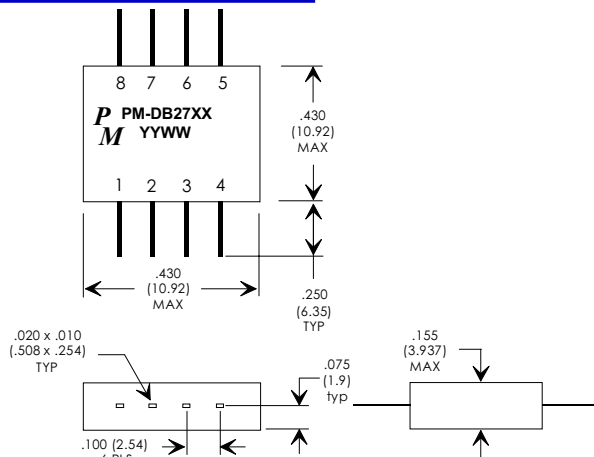
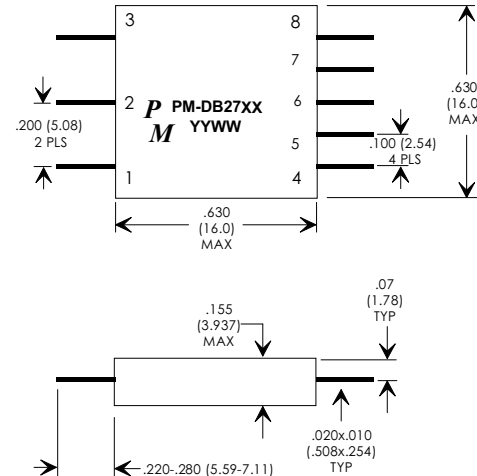


FIGURE #N



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DATABUS INTERFACE TRANSFORMERS

LOW PROFILE SINGLE/DUAL

FIGURE # R

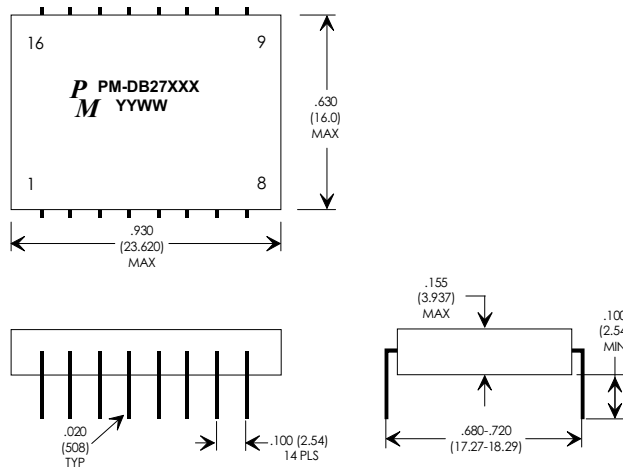


FIGURE # S

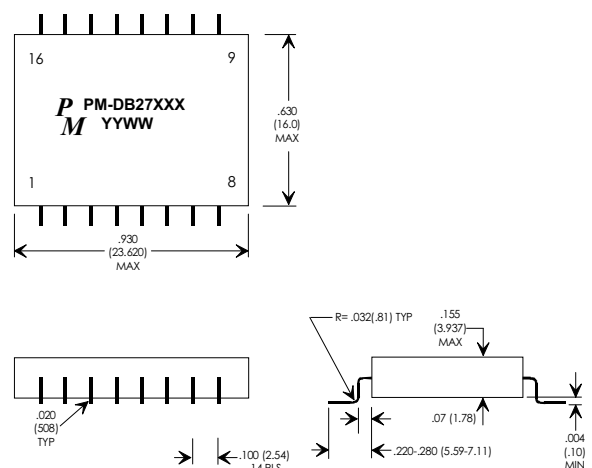


FIGURE # T

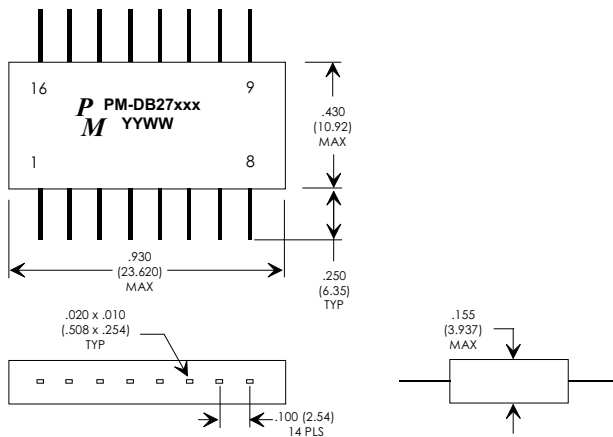
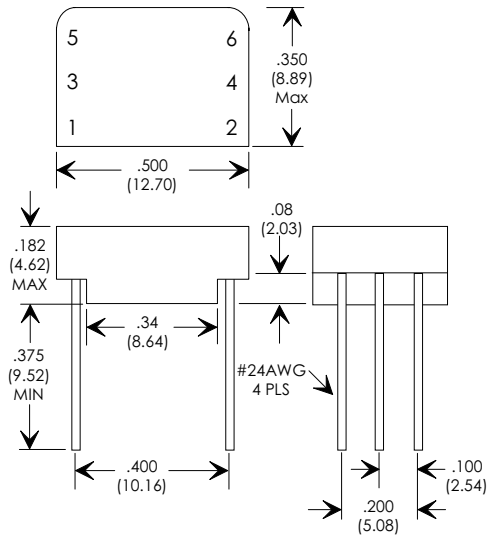


FIGURE # U



TRANSFORMER FOR DIGITAL AUDIO DATA TRANSMISSION

- ① Operating Transmission Rates: 1 to 7 Mbps
- ② Controlled Rise Time: 25 nsec Maximum

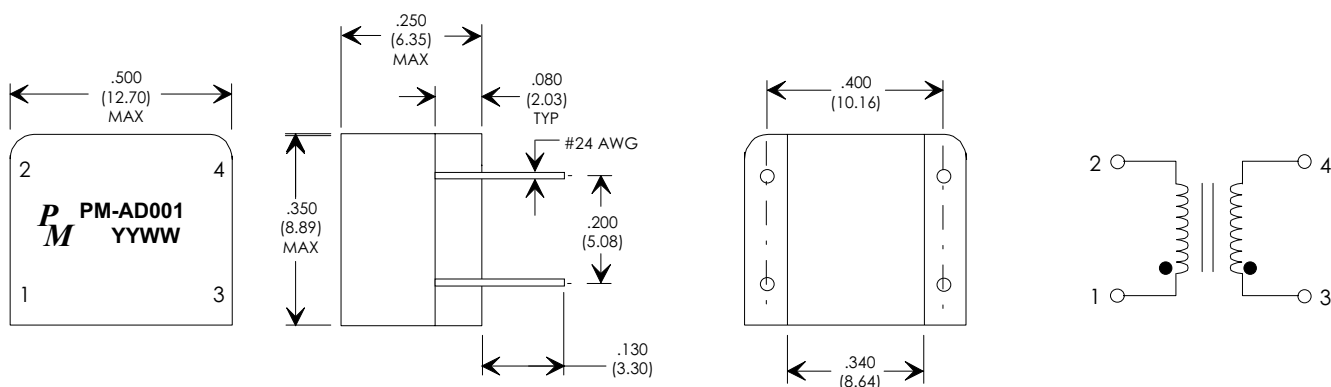
- ③ High Isolation Voltage: 2 KV Minimum
- ④ Inductance Test at 100KHz

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	Turns Ratio (±42%)	PRI Inductance (mH ± 20%)	PRI L _L (μH Max)	Rise Time nsec (Max)	ET V-μsec (Max)	Bandwidth 100KHz-55MHz (Typ)	Return Loss 100KHz-10MHz (Min)	Isolation (Vrms MIN.)	Schematic
PM-AD001	1:1	2.5	0.5	25	20	3 dB	20 dB	2000	THT
PM-AD001S	1:1	2.5	0.5	25	20	3 dB	20 dB	2000	SMT

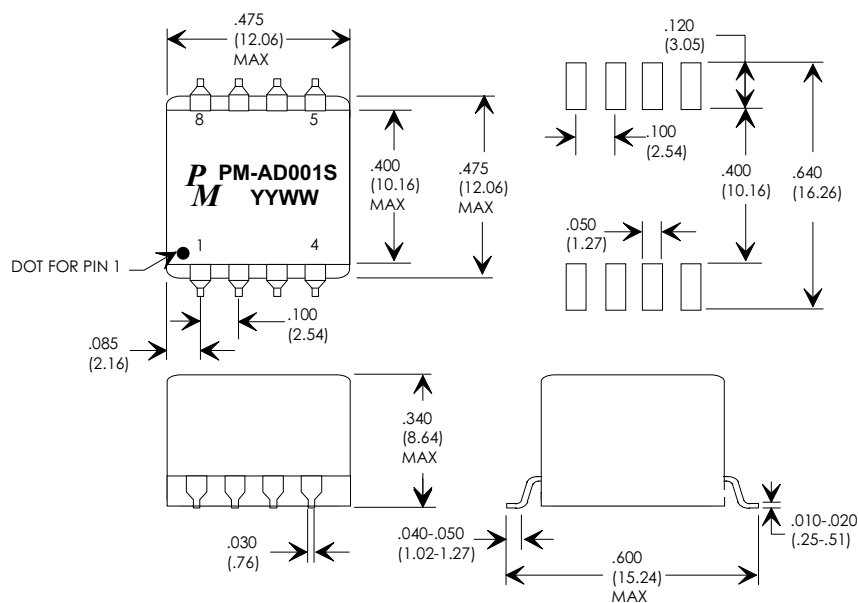
PM-AD001

SCHEMATIC



PM-AD001S

SCHEMATIC



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DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

Parts are UL1950 & CSA-950 Recognized Under UL File# E162344 or are Pending

- ① Thru Hole or SMD Package
- ② 1500Vrms Minimum Isolation Voltage
- ③ UL, IEC & CSA Insulation System
- ④ Extended Temperature Range Version

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	Ratio (SEC:PRI ± 3%)	Primary OCL (mH TYP.)	PRI - SEC L _L (μH Max.)	DCR (Ω Max)		Package / Schematic	IC Manufacture	IC P/N
				PRI	SEC			
PM-DSL10	1 : 2.0	12.5	40.0	4.0	2.0	EP13/G		
PM-DSL11	1 : 2.0	12.5	40.0	4.0	2.0	EP13/AC		
PM-DSL11G	1 : 2.0	12.5	40.0	4.0	2.0	EP13G/AC		
PM-DSL12	1 : 2.0	16.5	20.0	3.0	1.0	EP13/AD	Globespan	
PM-DSL13	1 : 1.0	5.0	16	1.5	1.65	EP13/I		
PM-DSL13G	1 : 1.0	5.0	16	1.5	1.65	EP13G/I		
PM-DSL14	1 : 2.0	12.5	18.0	2.1	1.5	EP13/D	Globespan	
PM-DSL15	1 : 1.5	2.25	30.0	3.63	3.36	EP13/E		
PM-DSL16	1 : 3.0	2.25	30.0	3.63	1.0	EP13/C		
PM-DSL17	1 : 1.0	1.0	12.0			R/F		
PM-DSL18	1 : 2.0ct	1.0	12.0			R/F		
PM-DSL19	1 : 2.0	3.0	30.0	2.5	1.0	EP13/A	Brooktree	BT8970
PM-DSL20	1 : 1.0	0.43	10.0	.45	.35	EP13/B		
PM-DSL20G	1 : 1.0	0.43	10.0	.45	.35	EP13G/B		
PM-DSL21G	1 : 2.0	3.0	11.0	2.5	1.6	EP13G/A	Brooktree	BT8970
PM-DSL22G	1 : 1.5	2.25	30.0	3.3	3.05	EP13G/C		
PM-DSL23	1 : 2.0	2.0	30.0	2.5	1.25	EP13/A	Brooktree	BT8921/8970
PM-DSL24	1 : 2.0	2.0	11.0	2.5	1.0	EP13/A	Brooktree	BT8921/8970
PM-DSL24G	1 : 2.0	2.0	11.0	2.5	1.0	EP13G/A	Brooktree	BT8921/8970
PM-DSL25	1 : 2.0	3.0	11.0	2.5	1.0	EP13/A	Brooktree	BT8921/8970
PM-DSL25G	1 : 2.0	3.0	11.0	2.5	1.0	EP13G/A	Brooktree	BT8921/8970
PM-DSL26	1 : 2.0	3.5		2.5	1.0	EP13/A	Brooktree	BT8960
PM-DSL26G	1 : 2.0	3.5		2.5	1.0	EP13G/A	Brooktree	BT8960
PM-DSL27	1 : 2.0	8.0		4	2.3	EP13/A	Brooktree	BT8960
PM-DSL27G	1 : 2.0	8.0		4	2.3	EP13G/A	Brooktree	BT8960
PM-DSL28	1 : 2.0	5.0	30.0	3.5	2.2	EP13/A	Brooktree	BT8960
PM-DSL28G	1 : 2.0	5.0	30.0	3.5	2.2	EP13G/A	Brooktree	BT8960
PM-DSL29	1 : 2.0	4.5	30.0	3.0	1.0	EP13/A	Brooktree	BT8960
PM-DSL29G	1 : 2.0	4.5	30.0	3.0	1.0	EP13G/A	Brooktree	BT8960
PM-DSL30	1 : 2.0	2.5	20.0	3.5	1.1	EP13/A	Brooktree	BT8960
PM-DSL30G	1 : 2.0	2.5	20.0	3.5	1.1	EP13G/A	Brooktree	BT8960
PM-DSL31	1 : 2.0	5.8	20.0	2.6	1.0	EP13/A	Brooktree	BT8970
PM-DSL31G	1 : 2.0	5.8	20.0	2.6	1.0	EP13G/A	Brooktree	BT8970
PM-DSL32	1 : 2.0	4.4	11.0	2.6	1.0	EP13/A	Brooktree	BT8970
PM-DSL32G	1 : 2.0	4.4	11.0	2.6	1.0	EP13G/A	Brooktree	BT8970
PM-DSL33	1 : 1.0	3.0	20.0	2.0	1.9	EP13/A	Brooktree	BT8952
PM-DSL33G	1 : 1.0	3.0	20.0	2.0	1.9	EP13G/A	Brooktree	BT8952
PM-DSL34	1 : 1.0	2.0	20.0	2.0	1.9	EP13/A	Brooktree	BT8952
PM-DSL34G	1 : 1.0	2.0	20.0	2.0	1.9	EP13G/A	Brooktree	BT8952
PM-DSL35	1 : 2.0	3.0	20.0	2.5	1.0	EP13/A	Burr Brown	AFC1124

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DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	Ratio (SEC:PRI) ± 3%	Primary OCL (mH TYP.)	PRI - SEC L _L (μH Max.)	DCR (Ω Max)		Package / Schematic	IC Manufacture	IC P/N
				PRI	SEC			
PM-DSL35G	1 : 2.0	3.0	20.0	2.5	1.0	EP13G/A	Burr Brown	AFC1124
PM-DSL36	1 : 1.8	2.95	11.0	3.2	1.8	EP13/A	Burr Brown	AFC1124
PM-DSL36G	1 : 1.8	2.95	11.0	3.2	1.8	EP13G/A	Burr Brown	AFC1124
PM-DSL37G	1 : 1.08	0.480	10.0	0.45	0.35	EP13G/I	Alcatel	MTK-20140
PM-DSL38G	1 : 2.0	0.530	25.0	3.3	1.4	EP7G/J	Globespan	DLC
PM-DSL39	1 : 4.0	2.0	30.0	4.0	0.3	EP13/A		
PM-DSL39G	1 : 4.0	2.0	30.0	4.0	0.3	EP13G/A		
PM-DSL40	1 : 2.0	0.800	10.0	1.5	0.8	EP13/D		
PM-DSL41	1 : 4.0	2.0	20.0	5.0	0.5	EP10/X	Globespan	
PM-DSL41G	1 : 4.0	2.0	20.0	5.0	0.5	EP10G/X	Globespan	
PM-DSL42	1 : 4.0	2.0	30.0	2.4	0.25	EP13/C	Globespan	
PM-DSL43	1 : 4.0	4.0	30.0	4.0	0.4	EP13/C	Globespan	
PM-DSL44	1 : 3.1	3.0	30.0	5.0	0.5	EP13/K	Globespan	
PM-DSL45	1 : 4.0	3.0	30.0	5.0	1.0	EP13/K	Globespan	
PM-DSL46	1 : 4.0	4.0	30.0	6.0	0.5	EP13/L	Globespan	
PM-DSL47	1 : 1.41	0.800	10.0	1.4	1.7	EP13/D		
PM-DSL48	1 : 1.8	2.75	50.0	6.0	3.2	P18-11/M	Brooktree/LV1	SK70704/6
PM-DSL49G	1 : 1.0	0.470	10.0	0.6	0.7	EP13G/I		
PM-DSL50	1 : 5.0	2.0	1.0	1.4	0.35	EP13/L		
PM-DSL51G	1 : 4.0	2.0	17.0	3.0	0.35	EP13G/L	Globespan	
PM-DSL53	1 : 1.0	200	36	10	5	EP13/B	Level One	LXT400/441
PM-DSL53G	1 : 1.0	200	36	10	5	EP13G/B	Level One	LXT400/441
PM-DSL54	1 : 1.0	200	60	8.0	16	EP13/N	Level One	LXT400/441
PM-DSL54G	1 : 1.0	200	60	8.0	16	EP13G/N	Level One	LXT400/441
PM-DSL55	1 : 1.0	40	40	8.0	8.0	EP7/M	Level One	LXT441
PM-DSL55G	1 : 1.0	40	40	8.0	8.0	EP7/M	Level One	LXT/441
PM-DSL56	1 : 2.0	.410	10	.84	.40	EP13/B	Alcatel	MTK-20150/140
PM-DSL56G	1 : 2.0	.410	10	.84	.40	EP13G/B	Alcatel	MTK-20150/140
PM-DSL57	1 : 1.0	.440	10	1.2	1.0	EP13/B	Alcatel	MTK-20141
PM-DSL58	1 : 1.0	.50		1.65	1.65	EP7/O	Alcatel	1AB071110008
PM-DSL59	1 : 1.0	.24		.70	.70	EP13/P	Alcatel	1AB01965-0026
PM-DSL60	1 : 2.0	1.50	12	2.0	.55	EP13/Q	Texas	THS6012
PM-DSL61	1 : 1.2	4.0	15	5.5	5.5	EP13/R	Motorola	XS143462SK1
PM-DSL61G	1 : 1.2	4.0	15	5.5	5.5	EP13G/R	Motorola	XS143462SK1
PM-DSL62	1 : 1.0	.40	10	1.4	1.3	EP13/I	Alcatel	MTK-20141
PM-DSL62G	1 : 1.0	.40	10	1.4	1.3	EP13G/I	Alcatel	MTK-20141
PM-DSL63	1 : 1.42	1.5	18	4.0	.75	EP13/Q	Texas	TNETD4000R
PM-DSL64	1 : 1.8	3.0	30	3.0	2.2	EP13/S	Level One	SK70704/706/
PM-DSL64G	1 : 1.8	3.0	30	3.0	2.2	EP13G/S	Level One	725/721
PM-DSL65	1 : 1.0	1.25	12	1.3	1.3	EP13/B	Lucent	LEO1
PM-DSL66	1 : 1.27	18	12	1.3	.85	EP13/T	Analog Devices	AD20msp918
PM-DSL67	1 : 1.41	.475	10	1.1	.90	EP13/T	Globespan	DMT IC
PM-DSL67G	1 : 1.41	.475	10	1.1	.90	EP13G/T	Globespan	DMT IC

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DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	Ratio (SEC:PRI) ± 3%	Primary OCL (mH TYP.)	PRI - SEC L _L (μH Max.)	DCR (Ω Max)		Package / Schematic	IC Manufacture	IC P/N
				PRI	SEC			
PM-DSL68G	1 : 1.27	17.6	12	1.4	.85	EP13G/T	Analog Devices	AD20msp918
PM-DSL69	1 : 2.2	3.0	11	2.5	1.0	EP13/D	Globespan	HDSL2
PM-DSL70	1 : 3.3	.800	10	1.1	.40	EP13/D	Conexant	20441
PM-DSL70G	1 : 3.3	.800	10	1.1	.40	EP13G/D	Conexant	20441
PM-DSL71	1 : 1.41	.100	12	1.0	1.0	EP13G/B	Globespan	DSL
PM-DSL72G	1 : 2.0	.100	12	1.4	.50	EP13G/B	Globespan	DSL
PM-DSL73G	1 : 4.0	2.0	12	2.5	1.0	EP13G/A	Globespan	MDSL
PM-DSL74G	1 : 5.4	3.0	12	2.2	.44	EP13G/A	Globespan	MDSL2
PM-DSL75	1 : 1.1	2.0	10	2.6	2.4	EP13/T	Analog Devices	AD20msp930
PM-DSL75G	1 : 1.1	2.0	10	2.6	2.4	EP13G/T	Analog Devices	AD20msp930
PM-DSL76G	1 : 1.0	.440	5	2.0	1.0	EP13G/T	Centillium	CT-L41SC04
PM-DSL77G	1 : 1.8	.450	6	1.6	.30	EP13G/I	Analog Devices	CT-L50SC04
PM-DSL78	1 : 2.0	.800	10	1.4	.80	EP13/D	Conexant	CN9001
PM-DSL79G	1 : 1.0	5.0	18	1.65	1.65	EP13G/T	Centillium	CT-L41ST01
PM-DSL80	1 : 1.27	17.6	12	1.8	1.0	EP13/T	Analog Devices	AD20msp918
PM-DSL81	1 : 2.3	2.0	35	1.6	.85	EP13/D	Level One	SK 70740
PM-DSL82G	1 : 5.4	2.0	18	5.0	.30	EP10/X	Globespan	
PM-DSL83G	1 : 1.0	200	60	18.5	18.5	EP13/N	Level One	LXT400
PM-DSL84	1 : 7.48	3.0	38	6.0	0.30	EP13/V		
PM-DSL84G	1 : 7.48	3.0	38	6.0	0.30	EP13G/V		
PM-DSL85	1 : 5.4	3.0	15	3.2	0.35	EP13/W	Globespan	GS 2237/GS3137
PM-DSL85G	1 : 5.4	3.0	15	3.2	0.35	EP13G/W	Globespan	GS 2237/GS3137
PM-DSL86	1 : 4.0	2.0	13	2.5	0.35	EP13/W		
PM-DSL87	1 : 2.14	3.2	30	3.74	2.0	EP13/Y		
PM-DSL88	1 : 4.0	2.0	32			EP17/Z	Globespan	HDSL
PM-DSL89	1 : 2.0	2.0	30	5.2	1.46	EP13/V		
PM-DSL89G	1 : 2.0	2.0	30	5.2	1.46	EP13G/V		
PM-DSL90	1 : 1.0	250	60	20.0	20.0	EP13/N		
PM-DSL91	1:1:1:1	0.8		5.0	5.0	EP13/AA		
PM-DSL92	1 : 5.4	3.00	15	4.0	0.35	EP13/V	Globespan	GS 2237/GS3137
PM-DSL92G	1 : 5.4	3.00	15	4.0	0.35	EP13G/V	Globespan	GS 2237/GS3137
PM-DSL93G	1 : 3.4	3.2	15	3.1	0.44	EP13G/V	METALINK	
PM-DSL95G	1 : 1.8	2.75	15	5.0	2.3	EP13G/V	METALINK	
PM-DSL96G	1 : 2.0	2.00	10	2.5	1.4	EP13G/AB		
PM-DSL97G	1 : 2.0	410	15	1.4	0.70	EP13G/B		
PM-DSL98G	1 : 3.4	3.25	16	3.0	0.44	EP13G/V	METALINK	
PM-DSL99	1 : 5.4	3.00	15	1.50	0.35	EP13/V		
PM-DSL99G	1 : 5.4	3.00	15	1.50	0.35	EP13G/V		
PM-DSL102	1 : 2.76	2.00	25	3.2	1.6	EP13/R		
PM-DSL102G	1 : 2.76	2.00	25	3.2	1.6	EP13G/R		
PM-DSL103	1 : 4.4	2.50	0.35			EP13/AE		
PM-DSL103G	1 : 4.4	2.50	0.35			EP13G/AE		
PM-DSL105G	1 : 4.0	2.05	15	3.0	0.45	EP13G/V	Globespan	

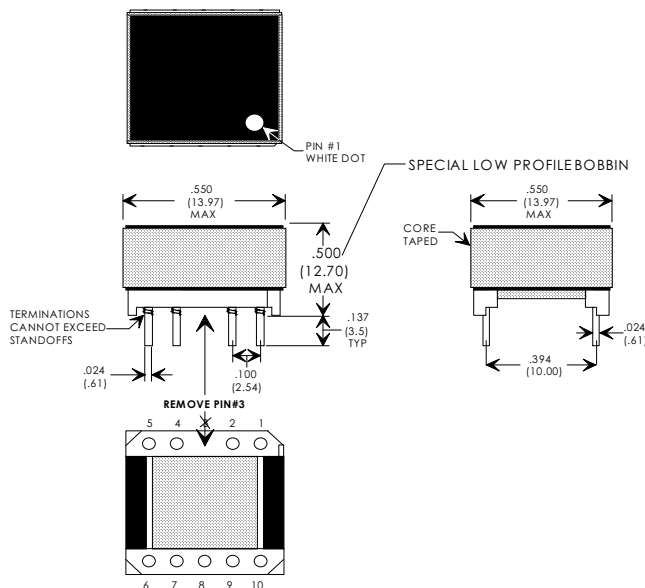
Specifications subject to change without notice.

pm-dslxx 06/00

20381 BARENTS SEA CIRCLE, LAKE FOREST, CA 92630 • TEL: (949) 452-0511 • FAX: (949) 452-0512 • <http://www.premiermag.com>

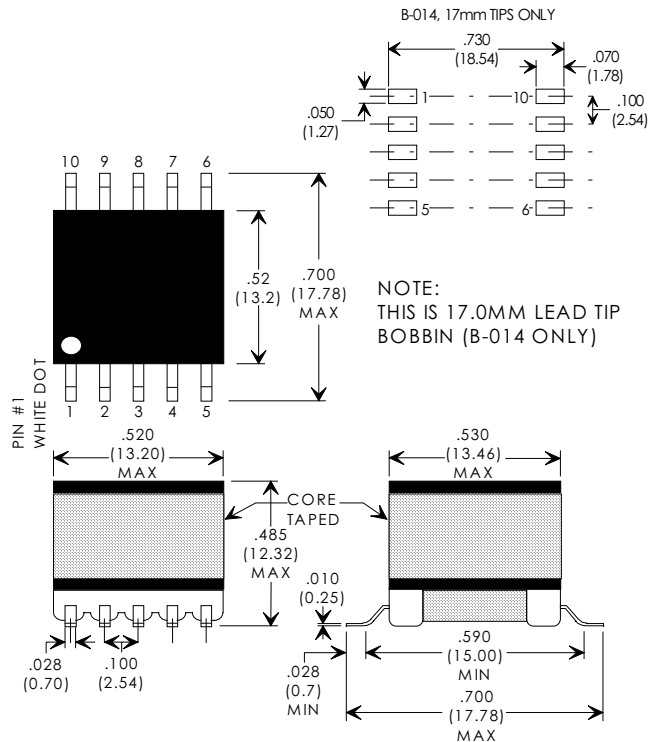
DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

MECH. PKG. "EP13"

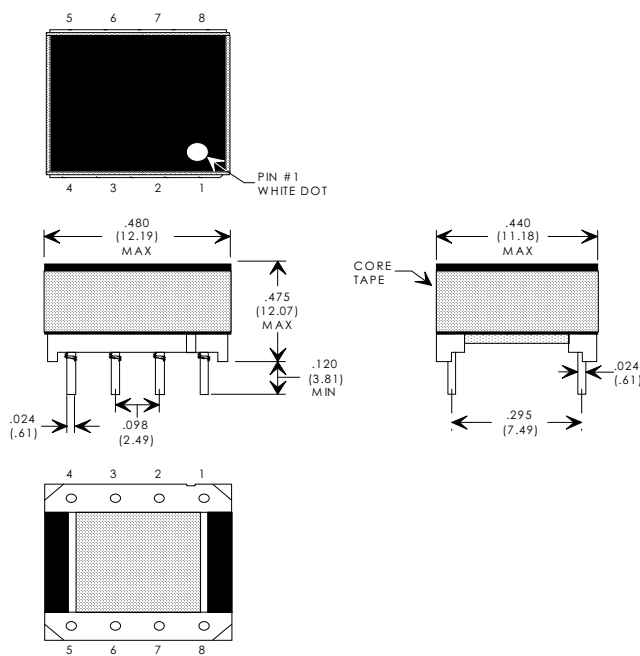


MECH. PKG. "EP13G"

RECOMMENDED PCB LAYOUT

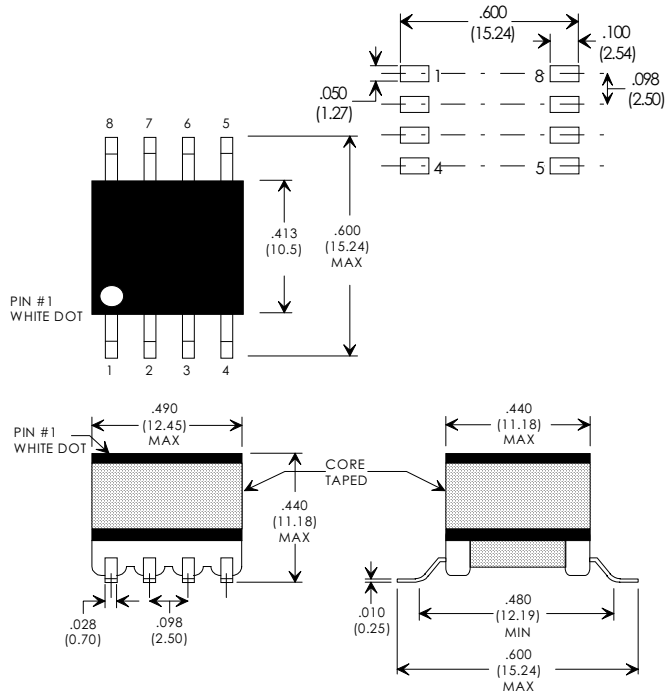


MECH. PKG. "EP10"



MECH. PKG. "EP10G"

RECOMMENDED PCB LAYOUT

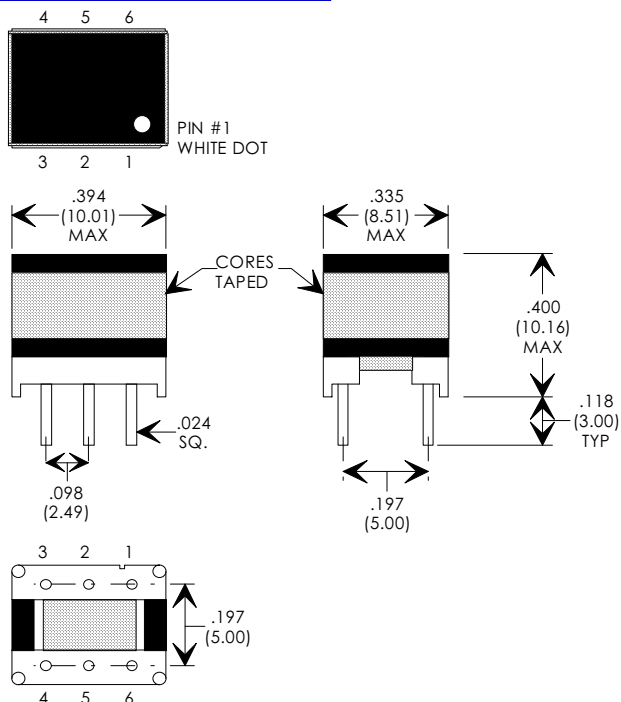


Specifications subject to change without notice.

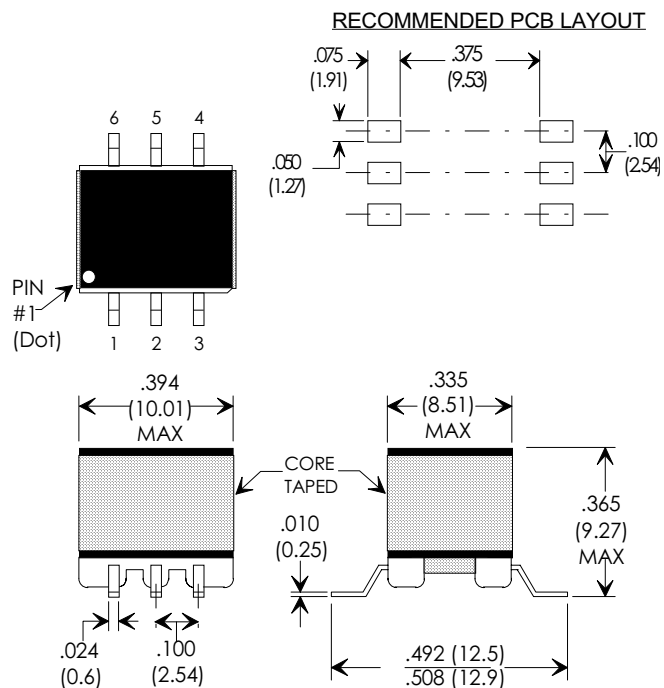
pm-dslxx 06/00

DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

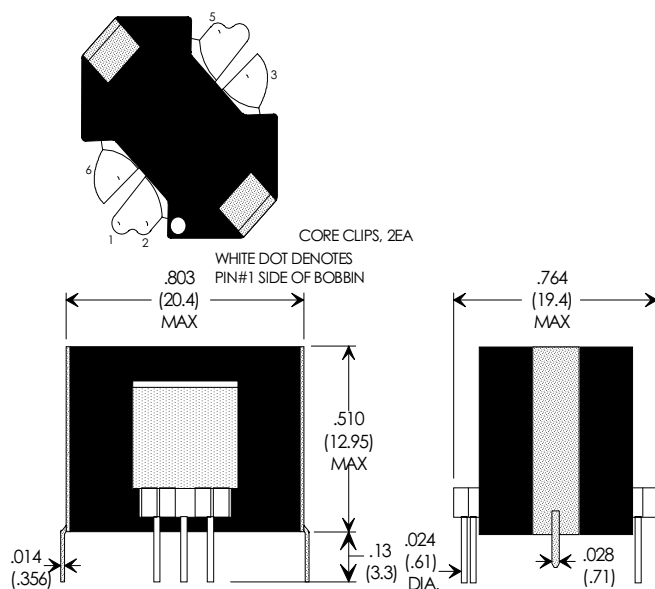
MECH. PKG. "EP7"



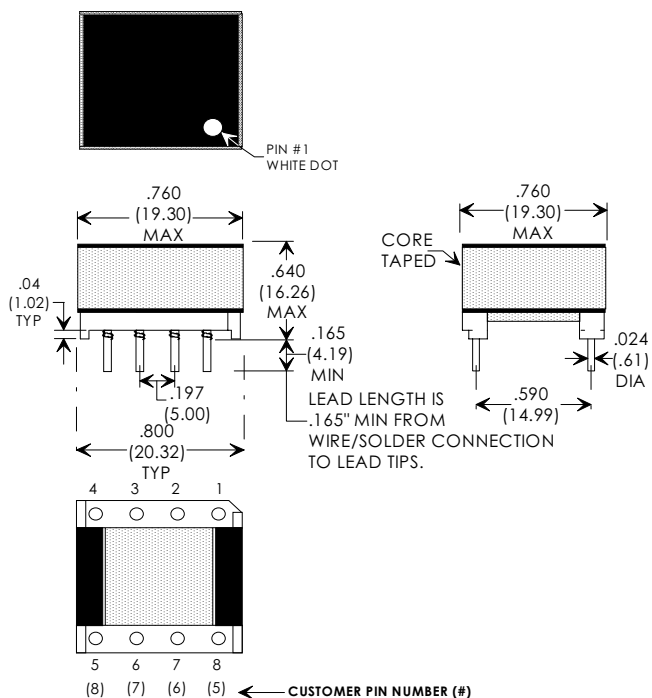
MECH. PKG. "EP7G"



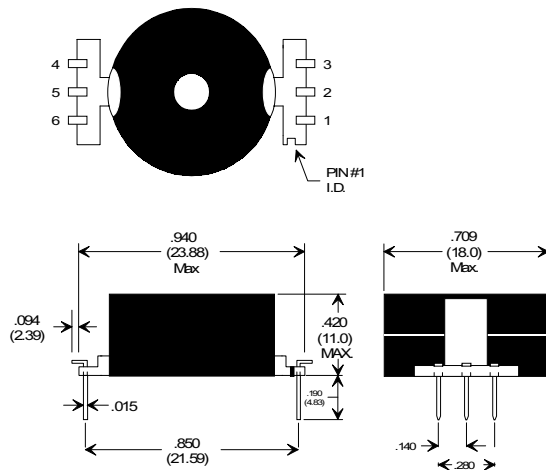
MECH. PKG. "R"



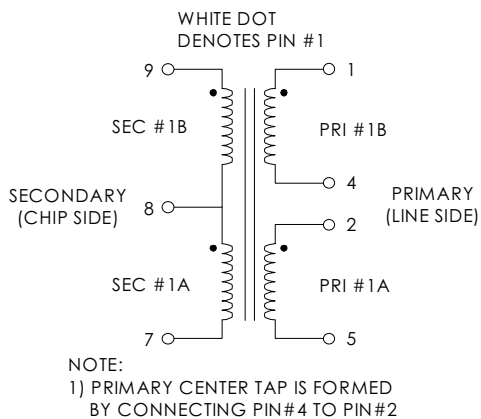
MECH. PKG. "EP17"



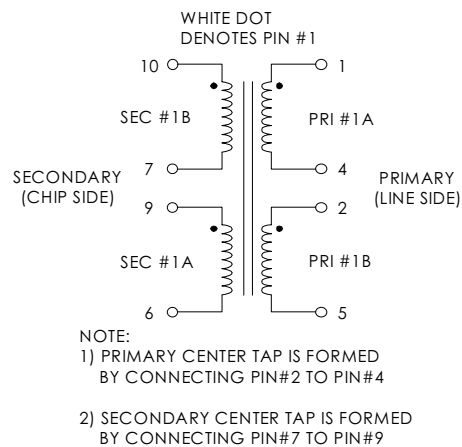
MECH. PKG. "P18/11"



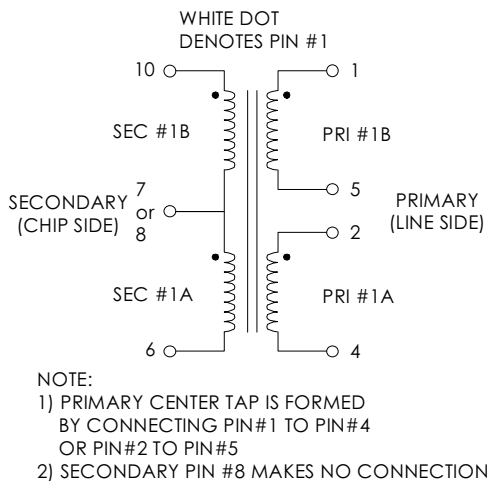
PM-DSLxx SCHEMATIC "A"



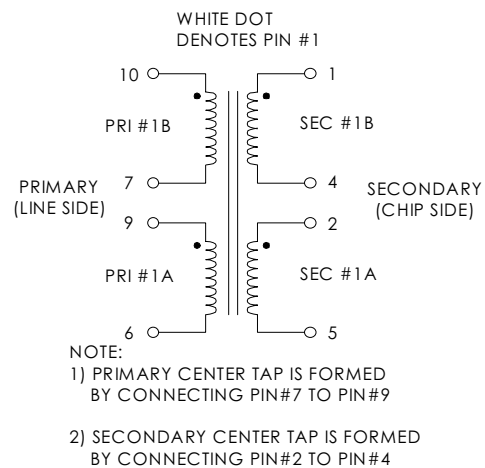
PM-DSLxx SCHEMATIC "B"



PM-DSLxx SCHEMATIC "C"

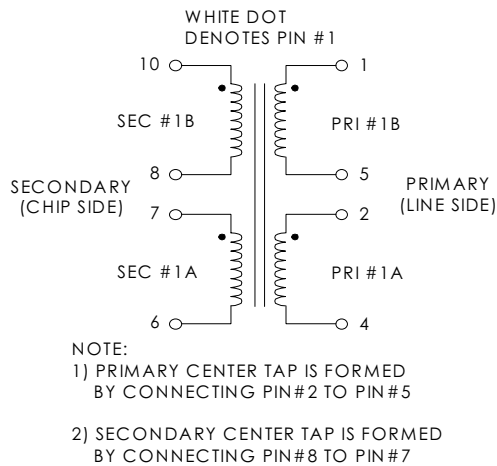


PM-DSLxx SCHEMATIC "D"

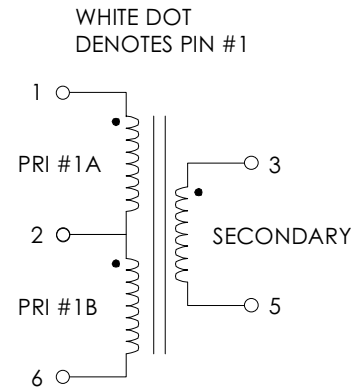


DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

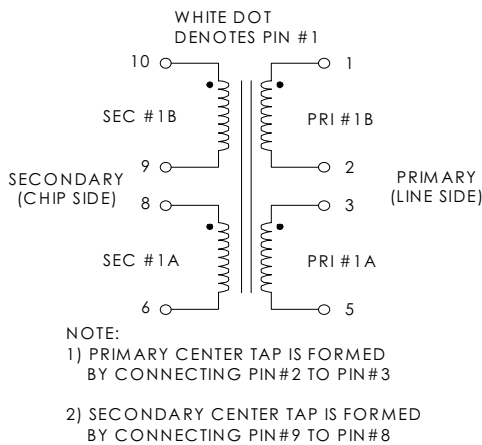
PM-DSLxx SCHEMATIC "E"



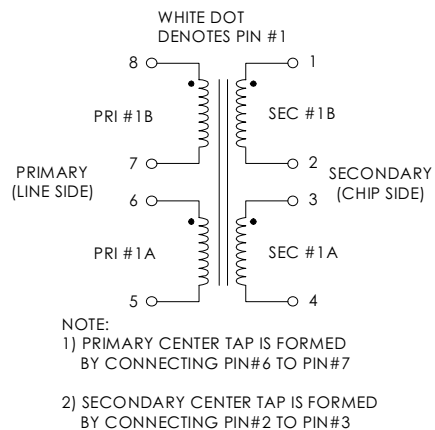
PM-DSLxx SCHEMATIC "F"



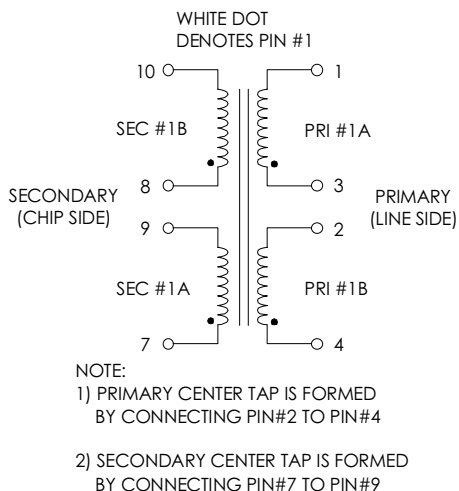
PM-DSLxx SCHEMATIC "G"



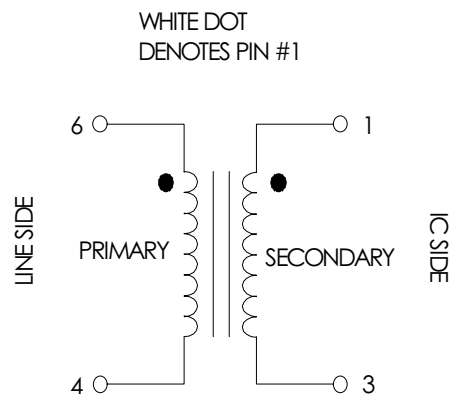
PM-DSLxx SCHEMATIC "H"



PM-DSLxx SCHEMATIC "I"

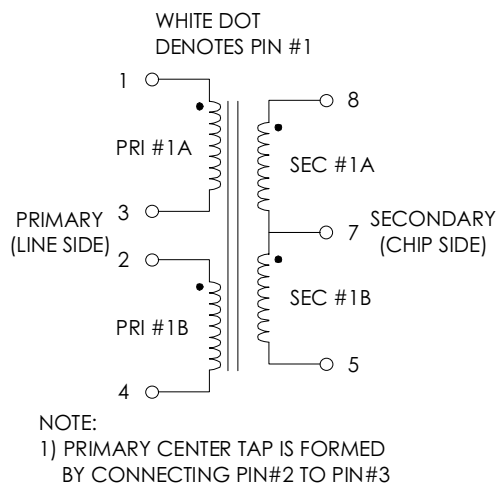


PM-DSLxx SCHEMATIC "J"

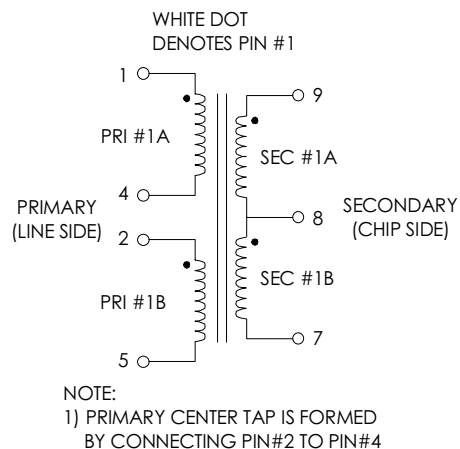


DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

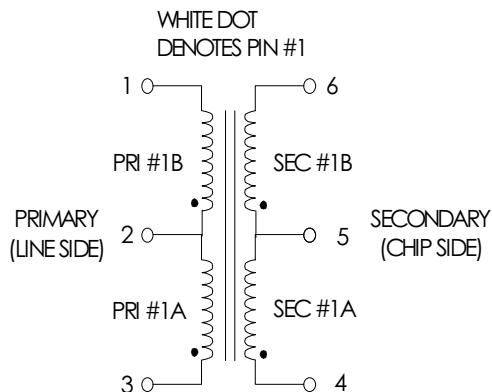
PM-DSLxx SCHEMATIC "K"



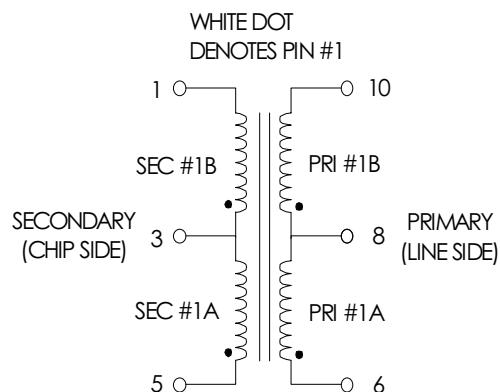
PM-DSLxx SCHEMATIC "L"



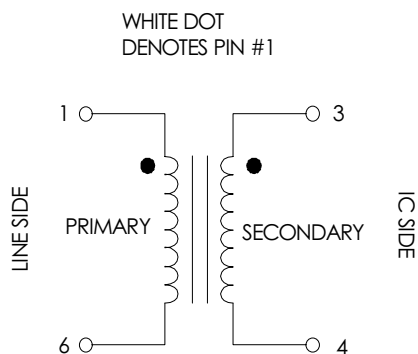
PM-DSLxx SCHEMATIC "M"



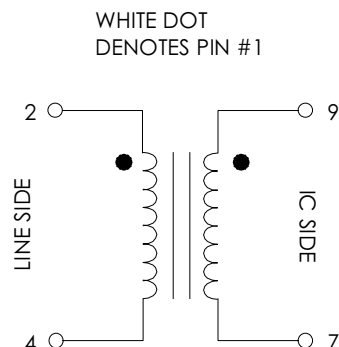
PM-DSLxx SCHEMATIC "N"



PM-DSLxx SCHEMATIC "O"

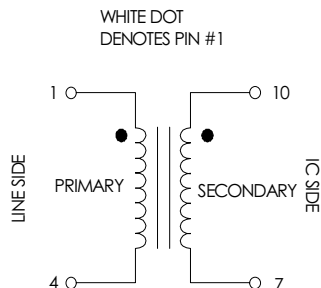


PM-DSLxx SCHEMATIC "P"

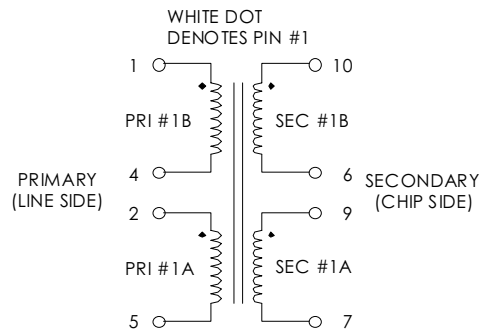


DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

PM-DSLxx SCHEMATIC "Q"

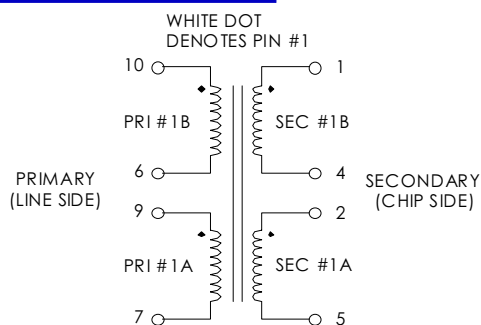


PM-DSLxx SCHEMATIC "R"



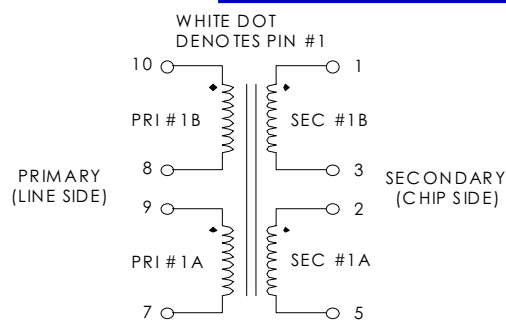
- NOTE:
- 1) PRIMARY CENTER TAP IS FORMED BY CONNECTING PIN#2 TO PIN#4
 - 2) SECONDARY CENTER TAP IS FORMED BY CONNECTING PIN#6 TO PIN#9

PM-DSLxx SCHEMATIC "S"



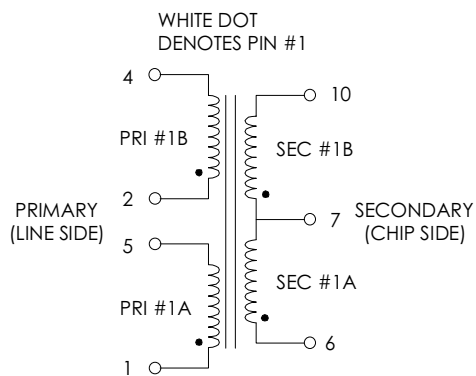
- NOTE:
- 1) PRIMARY CENTER TAP IS FORMED BY CONNECTING PIN#6 TO PIN#9
 - 2) SECONDARY CENTER TAP IS FORMED BY CONNECTING PIN#2 TO PIN#4

PM-DSLxx SCHEMATIC "T"



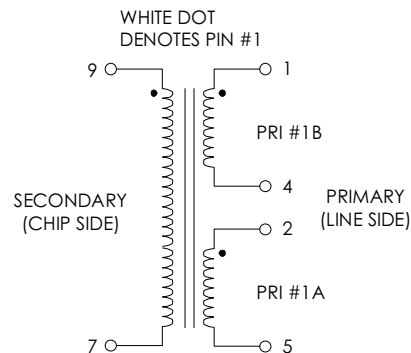
- NOTE:
- 1) PRIMARY CENTER TAP IS FORMED BY CONNECTING PIN#8 TO PIN#9
 - 2) SECONDARY CENTER TAP IS FORMED BY CONNECTING PIN#2 TO PIN#3

PM-DSLxx SCHEMATIC "U"



- NOTE:
- 1) PRIMARY CENTER TAP IS FORMED BY CONNECTING PIN#2 TO PIN#5

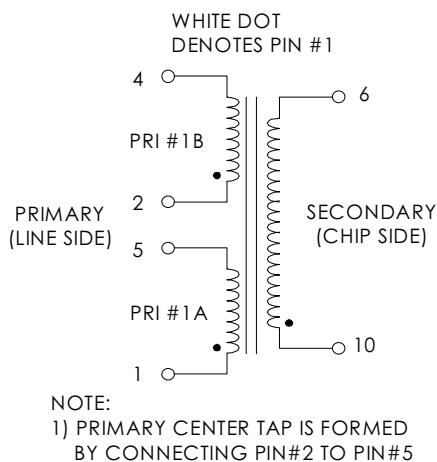
PM-DSLxx SCHEMATIC "V"



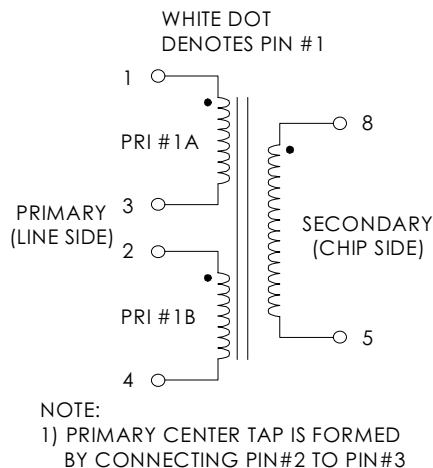
- NOTE:
- 1) PRIMARY CENTER TAP IS FORMED BY CONNECTING PIN#4 TO PIN#2

DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

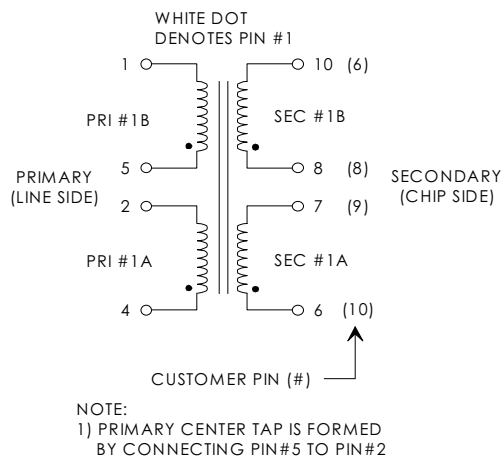
PM-DSLxx SCHEMATIC "W"



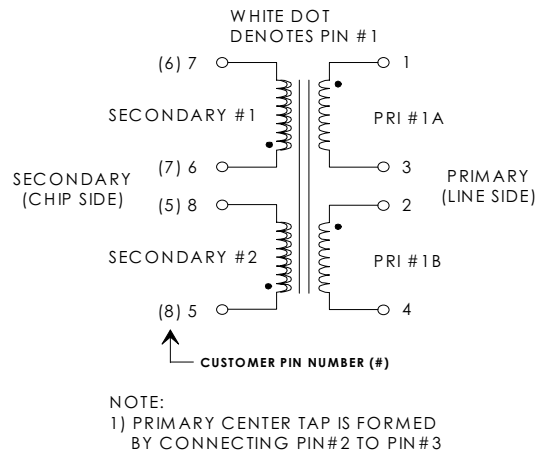
PM-DSLxx SCHEMATIC "X"



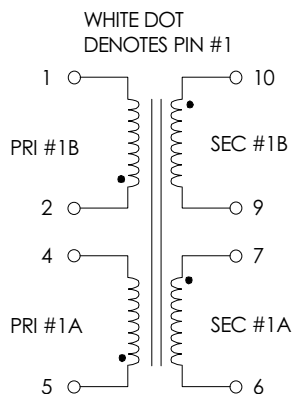
PM-DSLxx SCHEMATIC "Y"



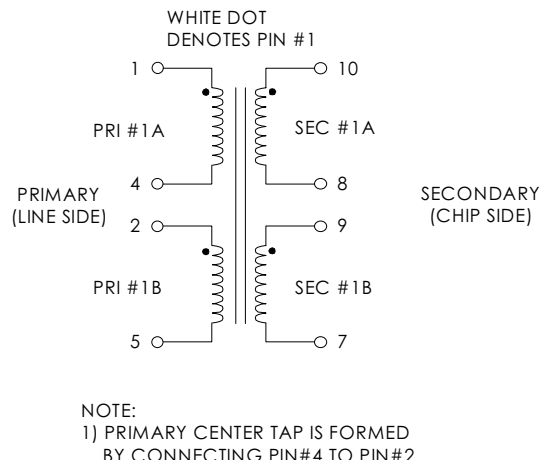
PM-DSLxx SCHEMATIC "Z"



PM-DSLxx SCHEMATIC "AA"

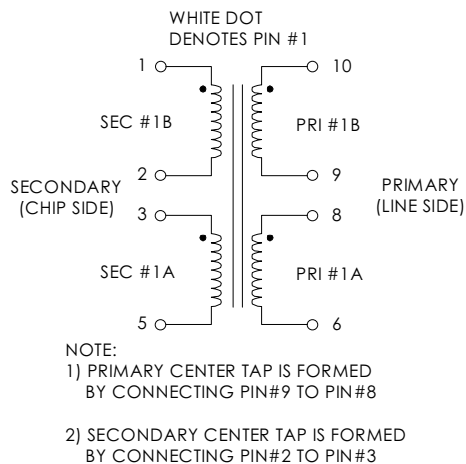


PM-DSLxx SCHEMATIC "AB"

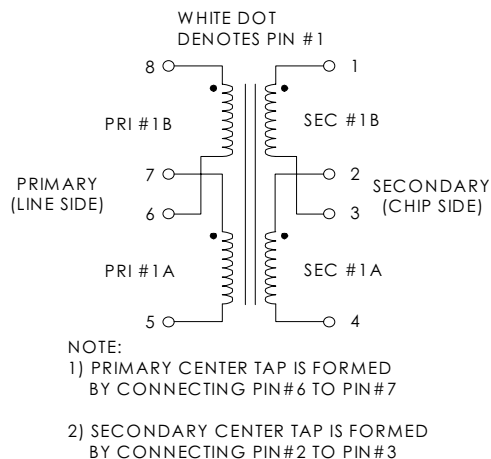


DSL LINE ISOLATION TRANSFORMERS THRU HOLE OR SMD

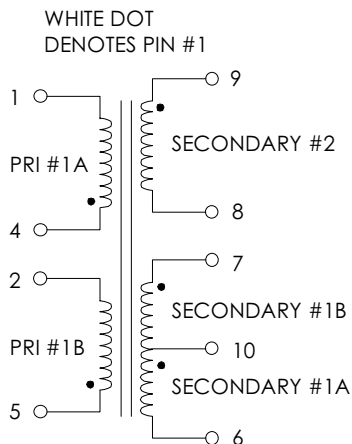
PM-DSLxx SCHEMATIC "AC"



PM-DSLxx SCHEMATIC "AD"



PM-DSLxx SCHEMATIC "AE"





COUPLED INDUCTOR

For Uses in ADSL POTS

Low Pass Filters

FEATURES

- ① Excellent Longitudinal Balance
- ② 1500V Isolation
- ③ Inductance Tolerance $\pm 5\%$
- ④ DC Current up to 100mA

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

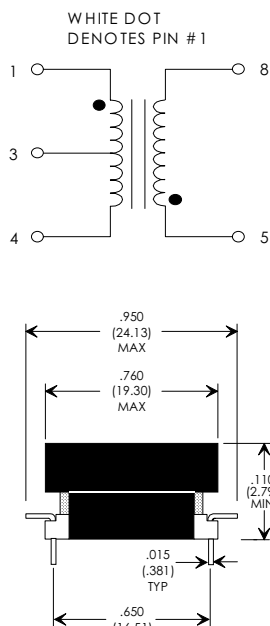
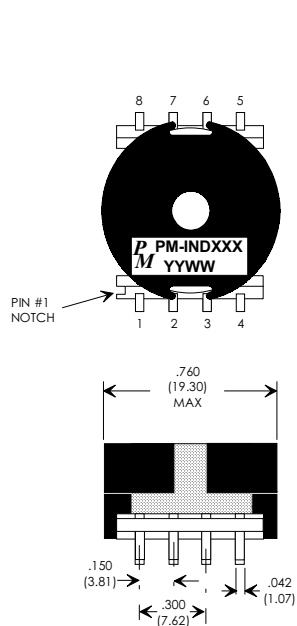
PART NUMBER	Inductance (each wdg) (mH)	DC R (each wdg) (Ω MAX)	Isolation (Vrms)	Function	Package / Schematics
PM-IND019	1.90 $\pm 5\%$	1.8	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND019E	1.90 $\pm 5\%$	2.3	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND020	2.00 $\pm 5\%$	1.9	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND020E	2.00 $\pm 5\%$	2.4	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND024	2.40 $\pm 5\%$	2.1	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND024E	2.40 $\pm 5\%$	2.7	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND025	2.50 $\pm 5\%$	2.2	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND025E	2.50 $\pm 5\%$	2.8	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND030	3.0 $\pm 5\%$	3.0	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND040	4.0 $\pm 5\%$	3.0	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND040E	4.0 $\pm 5\%$	4.0	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND045	4.5 $\pm 5\%$	3.6	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND045E	4.5 $\pm 5\%$	4.5	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND050	5.00 $\pm 5\%$	4.0	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND050E	5.0 $\pm 5\%$	5.4	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND052	5.25 $\pm 5\%$	4.5	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND052E	5.25 $\pm 5\%$	5.8	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND055	5.5 $\pm 5\%$	4.7	1500	Coupled Inductor for POTS Low Pass Filter	A
PM-IND055E	5.5 $\pm 5\%$	6.0	1500	Coupled Inductor for POTS Low Pass Filter	C
PM-IND060	6.0 $\pm 5\%$	5.0	1500	Coupled Inductor for POTS Low Pass Filter	B
PM-IND090	9.0 $\pm 5\%$	6.0	1500	Coupled Inductor for POTS Low Pass Filter	B

COUPLED INDUCTOR

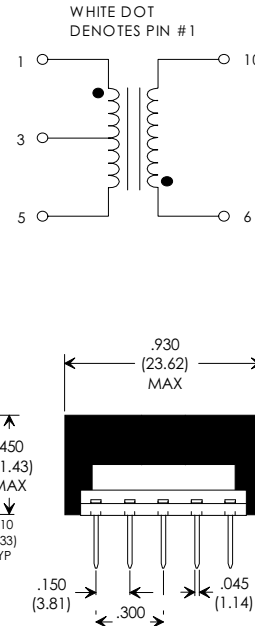
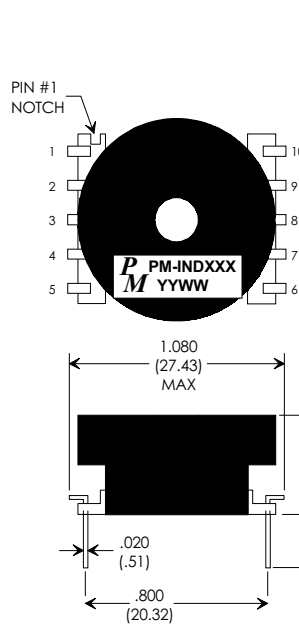
For Uses in ADSL POTS

Low Pass Filters

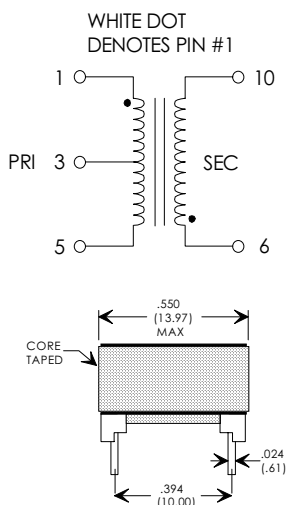
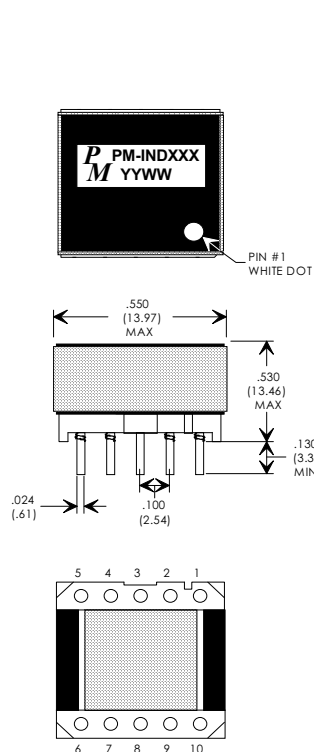
PACKAGE "A"



PACKAGE "B"



PACKAGE "C"



T1/E1/ISDN-PRI 3KV - REINFORCED SMD TRANSFORMERS

- ① For T1/CEPT/ISDN-PRI Telecommunications Applications
- ② Designed to Meet CCITT and FCC Requirements
- ③ Designed for Majority of Line Interface Transceiver Chips
- ④ Package meets UL 94-V0 Flammability
- ⑤ 3KV Reinforced Insulation to EN60950
- ⑥ Dual Core SMD Package

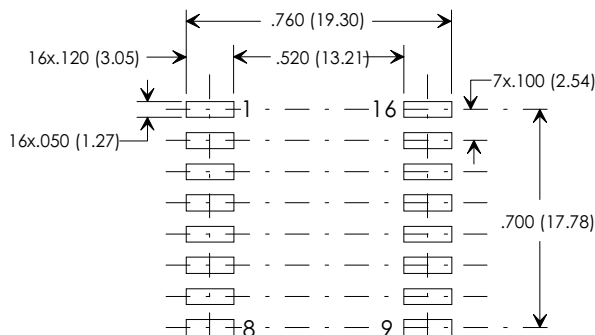
EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

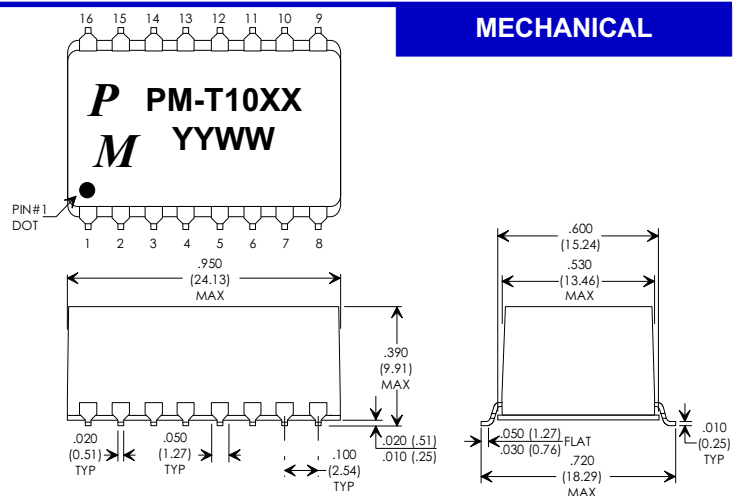
PART NUMBER	TURNS RATIO PRI : SEC (± 3%)	PRIMARY OCL (mH Min.)	PRIMARY L _p (μH Max.)	PRI-SEC Cw/w (pf Max.)	PRIMARY/SEC DCR (Ohms Max.)	PRIMARY PINS	Package / Schematic
PM-T1030	1ct:1ct & 1ct:1ct	1.20 & 1.20	1.00	50	0.80 / 0.80	1-3 & 6-8	A
PM-T1031	1ct:1ct & 1ct:2ct	1.20 & 1.20	1.00	50	0.80 / 1.00	1-3 & 6-8	A
PM-T1032	1ct:1.15ct & 1ct:1ct	1.60 & 1.60	1.20	50	0.80 / 0.90	16-14 & 6-8	A
PM-T1033	1ct:1.15ct & 1ct:1.15ct	1.20 & 1.20	1.00	50	0.80 / 0.90	1-3 & 6-8	A
PM-T1034	1ct:1.15ct & 1ct:2ct	1.50 & 1.20	1.00	50	0.80 / 1.00	16-14 & 6-8	A
PM-T1036	1ct:1.36ct & 1ct:1.36ct	1.20 & 1.20	1.00	50	0.80 / 1.00	1-3 & 6-8	A
PM-T1037	1ct:1.41ct & 1ct:1.41ct	1.20 & 1.20	1.00	50	0.80 / 1.00	16-14 & 11-9	A
PM-T1038	1ct:1ct & 1ct:1.36ct	1.20 & 1.20	1.00	50	0.80 / 1.00	1-3 & 6-8	A
PM-T1039	1ct:2ct & 1ct:1.08ct	1.20 & 1.20	1.00	50	0.80 / 1.00	16-14 & 6-8	A
PM-T1043	1ct:2ct & 1ct:1.14ct	1.20 & 1.20	1.00	50	0.80 / 1.00	16-14 & 6-8	A
PM-T1044	1ct:2ct & 1ct:1.36ct	1.20 & 1.20	1.00	50	0.80 / 1.00	16-14 & 6-8	A
PM-T1045	1ct:2ct & 1ct:2ct	1.20 & 1.20	1.00	50	0.80 / 1.00	16-14 & 6-8	A
PM-T1055	1ct:2ct & 1ct:2ct	1.20 & 1.20	1.00	50	0.80 / 1.00	16-14 & 11-9	A
PM-T1060 ⁽¹⁾	1:1.26tp & 1:1.26tp	1.50 & 1.50	0.90	50	0.80 / 1.00	1-3 & 6-8	B

(1) Dual Ratio Transformers, tp = tapped as follows PM-T1060: CORE A = PINS 16-14 : PINS 1-3 = 1:1.26; PINS 15-14 : PINS 1-3 = 1:1.00
CORE B = PINS 11-9 : PINS 6-8 = 1:1.26; PINS 10-9 : PINS 6-8 = 1:1.00

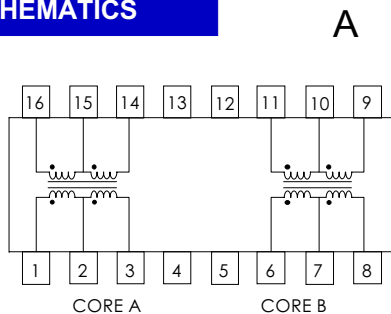
PCB LAYOUT



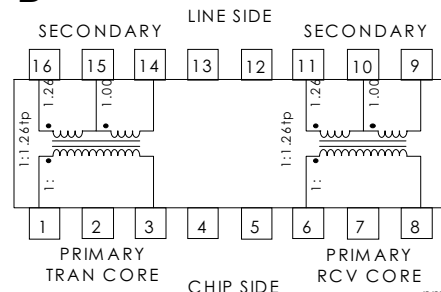
MECHANICAL



SCHEMATICS



B



Specifications subject to change without notice.

pmt10xx 6/98



T1/E1/ISDN-PRI 3KV - REINFORCED THRU-HOLE TRANSFORMERS

- ① Reinforced Insulation Per EN41003/EN60950
- ② 3000Vrms Minimum Isolation Voltage
- ③ For T1/CEPT/ISDN-PRI Line Interfaces

- ④ Matched to Leading Transceiver Chips
- ⑤ Industry Standard UL94-V0 Package
- ⑥ Single Core Configurations

NORMAL TEMP RANGE

SINGLE CORE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	URNS RATIO (Pri:Sec ± 5%)	PRIMARY OCL (mH Min.)	PRIMARY L_L (μH Max.)	PRI-SEC Cw/w (pf Max.)	PRIMARY DCR (Ohms Max.)	SECONDARY DCR (Ohms Max.)	Schematics on Page 2	Primary Pins
PM-IS30	1.27CT:1	0.80	0.70	15	0.50	0.35	C	1-5
PM-IS31	1CT:1	0.80	0.60	15	0.50	0.45	C	1-5
PM-IS32	1:1.36CT	1.20	0.60	35	0.50	0.60	D	10-6
PM-IS33	1CT:2CT	1.20	0.55	20	0.50	0.90	A	1-5
PM-IS34	1:1	1.20	0.50	20	0.50	0.50	B	1-5
PM-IS35 ⁽²⁾	1: 1.14	0.60	1.0	40	1.20	1.20	E	10-6
PM-IS36 ⁽¹⁾	1:1.58tp/2	1.50	0.70	20	0.70	1.20	D	10-6
PM-IS37 ⁽²⁾	1:1.36	0.60	1.0	40	1.20	1.20	E	10-6
PM-IS38	1:1.14CT	1.50	1.00	30	0.70	0.90	D	10-6
PM-IS39 ⁽¹⁾	1:1/1.26tp	1.50	0.60	35	0.70	1.10	D	10-6

EXTENDED TEMP RANGE

SINGLE CORE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	URNS RATIO (Pri:Sec ± 5%)	PRIMARY OCL (mH Min.)	PRIMARY L_L (μH Max.)	PRI-SEC Cw/w (pf Max.)	PRIMARY DCR (Ohms Max.)	SECONDARY DCR (Ohms Max.)	Schematics on Page 2	Primary Pins
PM-IS351 ⁽²⁾	1: 1.14	0.60	1.0	40	1.20	1.20	E	10-6
PM-IS361 ⁽¹⁾	1:1.58tp/2	1.80	0.90	35	1.00	1.40	D	10-6
PM-IS391 ⁽¹⁾	1:1/1.26tp	1.80	0.80	50	1.00	1.30	D	10-6

(1) Dual Ratio Transformers, tp = Tapped as Follows

PINS 10-6 : PINS 3-5 = 1:1.58 ; PINS 10-6 : PINS1-5 = 1:2

PINS 10-6 : PINS 3-5 = 1:1 ; PINS 10-6 : PINS1-5 = 1:1.26

(2) Pins 1 & 3 Are Electrically Connected Together Inside The Case, Trim/Remove Pin# 2,4,7,8,9

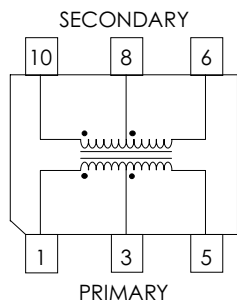
T1/E1/ISDN-PRI 3KV - REINFORCED THRU-HOLE TRANSFORMERS

SCHEMATICS

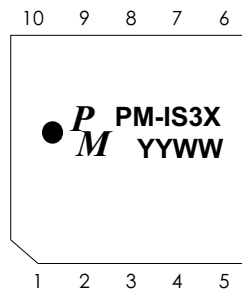
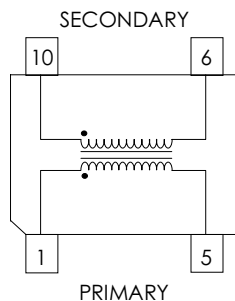
MECHANICAL

SINGLE CORE PACKAGE

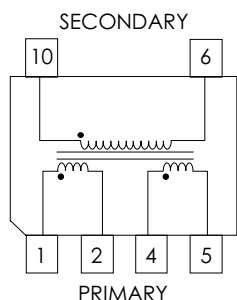
SCHEMATIC "A"



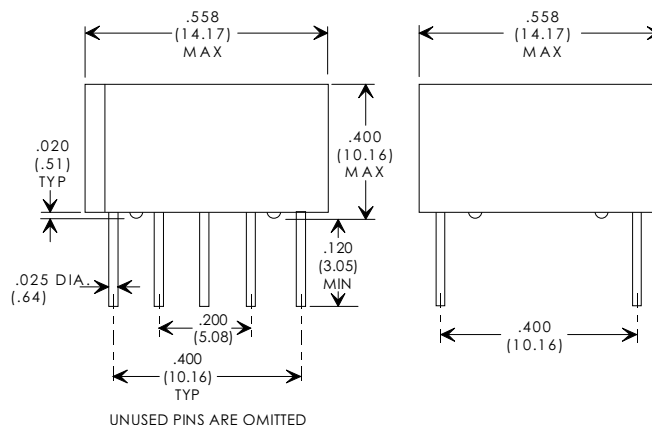
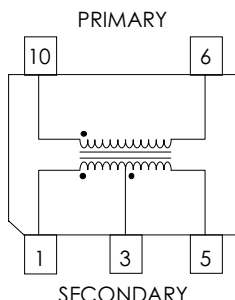
SCHEMATIC "B"



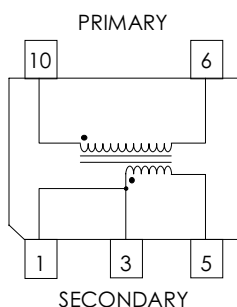
SCHEMATIC "C"



SCHEMATIC "D"



SCHEMATIC "E"





T1/E1 DUAL CORE SMD ISOLATION TRANSFORMERS

- ① Transmit & Receive in a Single SMD Package
- ② 2000Vrms Minimum Isolation Voltage
- ③ Industry Standard SMD Package
- ④ Extended Temperature Range Versions

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRIMARY OCL (mH Min.)	PRI - SEC L_L (μH Max.)	PRI - SEC Cw/w (pf Max.)	DCR (PRI/SEC Ω Max)		Schematic
	T1	T2				T1	T2	
PM-IS20	1:1.38ct	1:1:1	1.20	0.40	35	0.7/1.0	.7/.7/.7	D
PM-IS21	1ct:2ct	1:1	1.20	0.40	30	0.7/1.2	0.7/0.7	B
PM-IS22	1:2ct	1:1.15ct	1.20	0.40	30	0.7/1.2	0.7/0.8	A
PM-IS23	1:1.15ct	1:2ct	1.20	0.40	30	0.7/0.8	0.7/1.2	A
PM-IS24	1:2ct	1:1.36ct	1.20	0.40	35	0.7/1.2	0.7/0.9	A
PM-IS25	1:2ct	1:1.36	1.20	0.40	35	0.7/1.2	0.7/0.9	C
PM-IS26	1:2ct	1:2ct	1.20	0.40	35	0.7/1.2	0.7/1.2	A
PM-IS27	1:1.15ct	1ct:2ct	1.20	0.40	30	0.7/0.8	0.7/1.2	E
PM-IS63	1ct:2ct	1:1.36ct	1.20	0.60	30	0.7/1.2	0.7/0.9	I

EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRIMARY OCL (mH Min.)	PRI - SEC L_L (μH Max.)	PRI - SEC Cw/w (pf Max.)	DCR (PRI/SEC Ω Max)		Schematic
	T1	T2				T1	T2	
TSD-967 ⁽²⁾	1:1.27 Tp ¹	1ct:2ct	1.50/2.0	0.80/0.60	50/45	0.9/1.1	1.0/2.0	E
TSD-982 ⁽²⁾	1ct:2ct	1ct:2ct	1.50	0.40	35	0.7/1.4	0.7/1.4	F
PM-IS28	1ct:2ct	1ct:2ct	1.50	0.60	45	1.0/2.0	1.0/2.0	F
PM-IS29	1ct:2ct	1ct:1ct	1.50	0.60	45	1.0/2.0	1.0/1.0	G
PM-IS60	1:1.15ct	1ct:2ct	1.50	0.80	45	0.9/1.0	1.0/2.0	H
PM-IS61	1ct:1.15ct	1ct:1.15ct	1.50	0.80	45	1.0/1.0	1.0/1.0	G
PM-IS62	1ct:1ct	1ct:1ct	1.50	0.60	45	1.0/1.0	1.0/1.0	G
PM-IS64	1:1.27 Tp ¹	1ct:1ct	1.50/2.0	0.80/0.60	50/45	0.9/1.1	1.0/1.0	E
PM-IS65	1ct:2ct	1ct:1ct	1.50	0.60	45	1.0/2.0	1.0/1.0	F
PM-IS66	1ct:1.5ct	1ct:2ct	1.50	0.60	45	1.0/2.0	1.0/2.0	F
PM-IS67	1ct:2.3ct	1ct:1ct	1.50	0.60	45	1.0/2.0	1.0/1.0	G
PM-IS68	1ct:2ct	1ct:2ct	1.50	0.60	45	1.0/2.0	1.0/2.0	J
PM-IS69	1:2ct	1:1.36ct	1.50	0.40	45	1.0/2.0	1.0/1.4	A
PM-IS70	1ct:2.42ct	1ct:2.42ct	1.20	0.60	25	0.7/1.2	0.7/1.2	J
PM-IS71	1:1.14ct	1: 2ct	1.50	0.50	40	0.7/0.9	0.7/1.2	A
PM-IS72	1:1.15ct	1ct:2ct	1.50	0.80	40	0.9/1.0	1.0/2.0	E
PM-IS73	1ct:2ct	1:1.36ct	1.50	0.60	40	1.0/2.0	1.0/1.4	I
PM-IS74	1ct:1ct	1ct:2.4ct	1.00	0.80	30	.85/.85	.85/1.5	G
PM-IS75	1ct:3ct	1ct:1ct	1.00	1.0	40	1.0/2.0	1.0/1.0	G
PM-IS76	1ct:1ct	1ct:2ct	1.20	0.60	30	1.0/1.00	1.0/2.0	F
PM-IS77	1ct:2ct	1:1	1.40	0.50	30	0.7/1.2	0.7/0.7	B
PM-IS78	1:1ct	1:1ct	1.2	0.70	22.0	0.8/0.8	0.8/0.8	k
PM-IS79	1ct:2ct	1ct:1ct	2.50	0.60	45	0.7/1.4	0.7/1.4	G

Tp¹: T1 RATIO'S ARE, PINS 16-14 : PINS 1-2 = 1: 0.027 ; PINS 16-14 : PINS 2-3 = 1:1.00 ; PINS 16-14:PINS 1-3 = 1:1.027

(2): 1500Vrms HI-POT

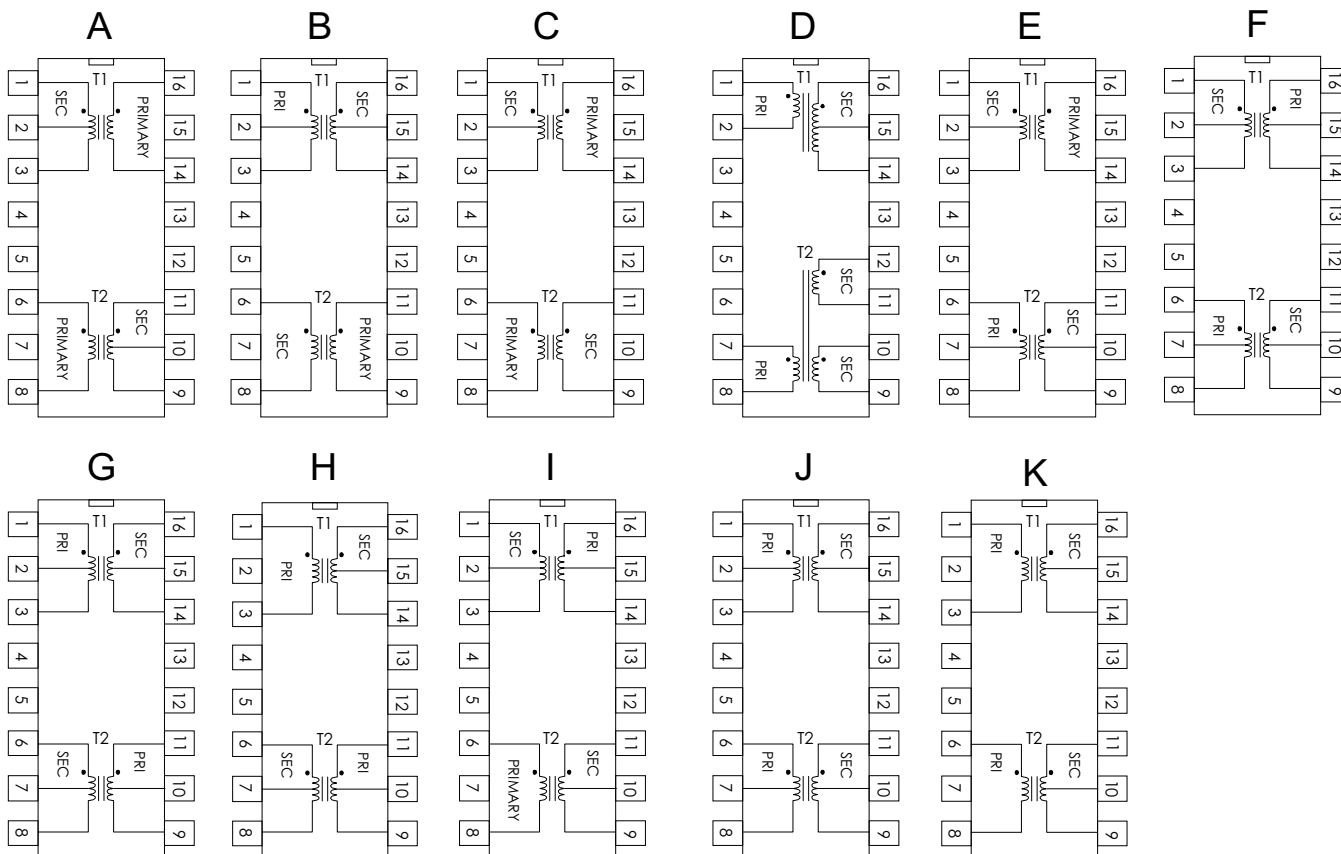
Specifications subject to change without notice.

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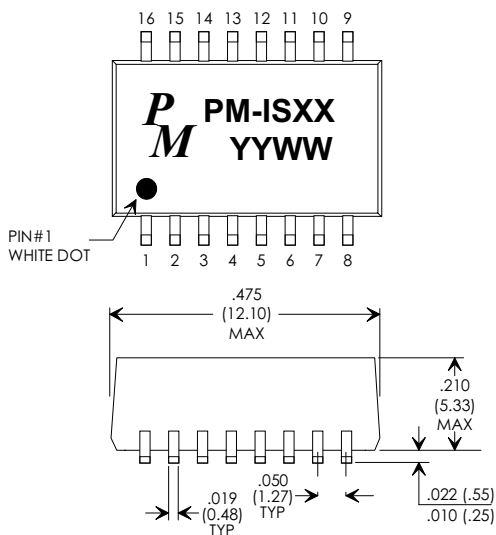
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T1/CEPT DUAL CORE SMD ISOLATION TRANSFORMERS

SCHEMATICS

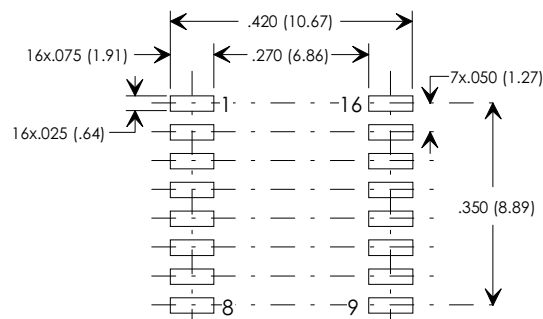


MECHANICAL



PCB LAYOUT

RECOMMENDED PCB LAYOUT





T1/E1/ISDN-PRI DUAL CORE SMD ISOLATION TRANSFORMERS

- ① Transmit & Receive in a Single SMD Package
- ② 1500Vrms Minimum Isolation Voltage
- ③ Industry Standard SMD Package
- ④ Extended Temperature Range Versions

NORMAL TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRIMARY OCL (mH Min.)	PRI-SEC L _L (μH Max.)	PRI-SEC Cw/w (pf Max.)	DCR (PRI/SEC Ω Max)		Schematic
	T1	T2				T1	T2	
PM-IS80	1ct:2ct	1ct:2ct	1.20	0.60/0.60	35/35	0.7/1.2	0.7/1.2	C
PM-IS81	1ct:2ct	1:1.36ct	1.20	0.60/0.80	35/35	0.7/1.2	0.7/0.9	B
PM-IS82	1:2ct	1ct:1.14ct	1.20	0.50/0.80	40/35	0.7/1.2	0.7/0.9	A
PM-IS83	1:1.15ct	1ct:2ct	1.50/1.20	0.80/0.60	35/40	0.7/0.9	0.7/1.2	F
PM-IS84	1ct:2ct	1:1.08ct	1.20	0.60/0.60	35/30	0.7/1.1	0.7/0.9	B

EXTENDED TEMP RANGE

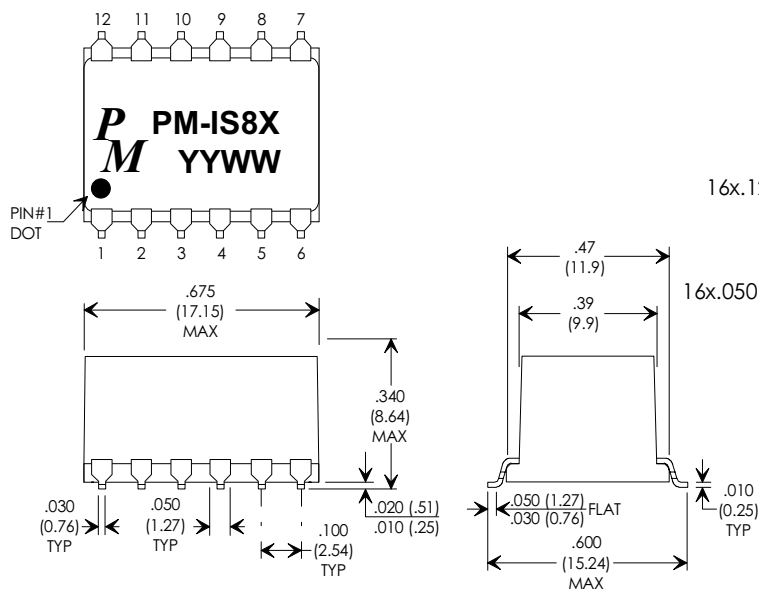
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRIMARY OCL (mH Min.)	PRI-SEC L _L (μH Max.)	PRI-SEC Cw/w (pf Max.)	DCR (PRI/SEC Ω Max)		Schematic
	T1	T2				T1	T2	
PM-IS85	1ct:2ct	1ct:2ct	1.20	0.80/0.80	45/45	1.0/1.7	1.0/1.7	C
PM-IS86	1ct:2ct	1:1.36ct	1.60	1.00/0.80	60/50	1.2/2.0	1.7/1.7	B
PM-IS87	1:1.15ct	1ct:2ct	1.60	0.80/0.80	60/50	1.0/1.0	1.2/2.0	F
PM-IS88	1:2ct	2:1	1.60	1.20/1.20	50/40	1.1/1.1	1.1/0.7	G
PM-IS89	1ct:1ct	1ct:1ct	1.20	0.80/0.80	45/45	1.0/1.0	1.0/1.0	D
PM-IS90	1ct:1.15ct	1ct:1.15ct	1.20	0.80/0.80	50/50	1.1/1.4	1.1/1.4	D
PM-IS91	1ct:1ct	1ct:2ct	1.20	0.80/0.80	50/50	1.0/1.0	1.0/1.8	D
PM-IS92	1ct:1.15ct	1ct:1ct	1.60	0.80/0.80	60/60	1.2/1.4	1.2/1.2	C
PM-IS93	1ct:1.36ct	1ct:1.36ct	1.20	0.80/0.80	50/50	1.2/1.4	1.2/1.4	D
PM-IS94	1ct:1.41ct	1ct:1.41ct	1.20	0.80/0.80	50/50	0.9/1.2	0.9/1.2	E
PM-IS95	1ct:2.30ct	1ct:2ct	1.20	0.80/0.80	60/50	1.1/2.1	1.0/1.7	C
PM-IS96	1Tp ⁽¹⁾ :2ct	1ct:2ct	1.20	1.0/1.0	60/60	1.1/2.2	1.1/2.2	C

(1) Tp: T1 RATIO'S ARE, PINS 12-10 : PINS 1-2 = 1:1.00 ; PINS 11-10:PINS 1-3 = 1:2.53ct ; PINS 12-11:PINS 1-3 = 1:9.52ct

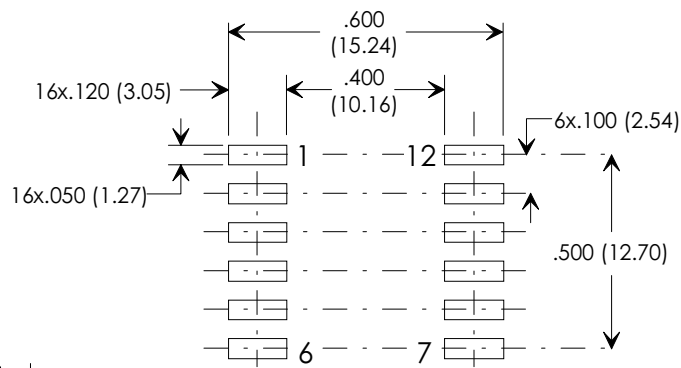
T1/E1/ISDN-PRI DUAL CORE SMD ISOLATION TRANSFORMERS

MECHANICAL

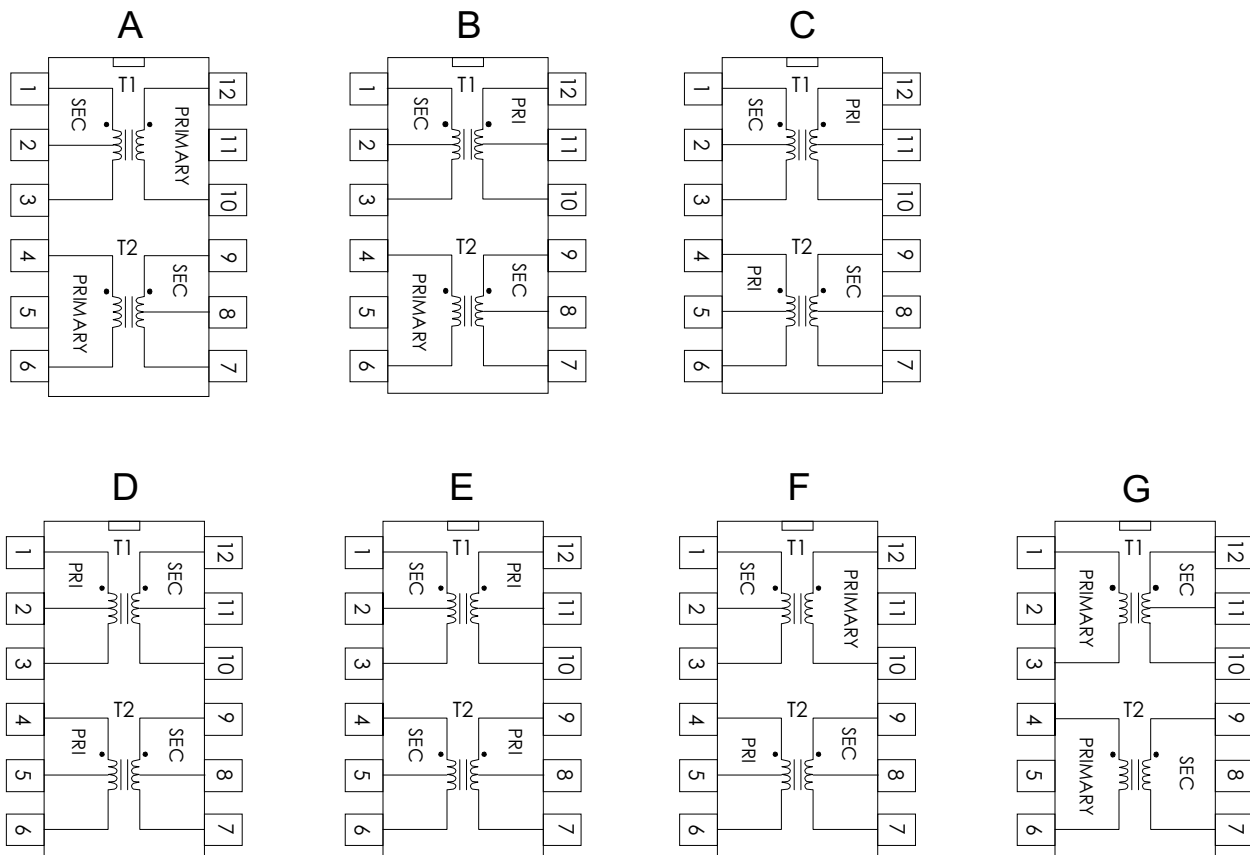


PCB LAYOUT

RECOMMENDED P.C.B. LAYOUT



SCHEMATICS





T1/E1 QUAD PORT SMD ISOLATION TRANSFORMERS

- ① Transmit & Receive in a QUAD SMD Package
- ② 1500Vrms Minimum Isolation Voltage
- ③ Industry Standard SMD Package
- ④ Extended Temperature Range Versions

NORMAL TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRI OCL TX&RX (mH TYP.)	PRI - SEC TX&RX L _L (μH Max.)	PRI - SEC Cw/w (pf Max.)	PRIMARY PINS		Schematic
	TX	RX				TX	RX	
PM-8100	1.36CT:1	1:2CT	1.2	0.8	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	C
PM-8101	1CT:1.41	1.41:1CT	1.2	0.8	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	C
PM-8102	2CT:1	1:2CT	1.2	1.0	40	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	C
PM-8103	1:2	2CT:1	1.2	1.0	35	1-2,9-10,11-12,19-20	3-5,6-8,13-15,16-18	D
PM-8104	1:1.36	1:1	1.2	0.8	35	1-2,6-7,11-12,16-17	38-37,33-32,28-27,23-22	F
PM-8105	1:2	1:1	1.2	0.8	35	1-2,6-7,11-12,16-17	38-37,33-32,28-27,23-22	F
PM-8106	1:1.15	1:1	1.2	0.8	35	1-2,6-7,11-12,16-17	38-37,33-32,28-27,23-22	F
PM-8107	1:2.40	1:1	1.2	0.5	35	1-2,8-9,11-12,18-19	38-37,35-34,28-27,25-24	F
PM-8108	1:2CT	1CT:2	1.2	0.6	35	4-5,9-10,14-15,19-20	1-3,6-8,11-13,16-18	C
PM-8109	1:2	1:2	1.2	0.6	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	E
PM-8110	1:1.15	1:1.15	1.2	0.6	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	E
PM-8111	1:1.79	1:2	1.2	0.6	35	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37	B
PM-8112	1:1.15	1:2CT	1.2	0.6	35	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38	A
PM-8113	1CT:1.41	1CT:1.41	1.2	0.6	35	1-3,6-8,11-13,16-18	21-23,26-28,31-33,36-38	C
PM-8114	1:2CT	1:1CT	1.2	0.6	35	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37	B
PM-8115	1:1.36CT	1:2CT	1.2	0.6	35	24-25,29-30,34-35,39-40	4-5,9-10,14-15,19-20	C
PM-8116	1:2	1:2CT	1.2	0.6	35	1-2,9-10,11-12,19-20	23-25,26-28,33-35,36-38	D
PM-8117	1:2CT	1:2CT	1.2	0.6	35	4-5,9-10,14-15,19-20	24-25,29-30,34-35,39-40	C
PM-8118	1:1.14	1:1.14CT	1.2	0.6	35	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38	A
PM-8119	1:1.36	1:1.36CT	1.2	0.6	20	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38	A

EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRI OCL TX&RX (mH TYP.)	PRI - SEC TX&RX L _L (μH Max.)	PRI - SEC Cw/w (pf Max.)	PRIMARY PINS		Schematic
	TX	RX				TX	RX	
PM-8200	1.36CT:1	1:2CT	1.5	1.0	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	C
PM-8201	1CT:1.41	1.41:1CT	1.5	1.0	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	C
PM-8202	2CT:1	1:2CT	1.5	1.2	40	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	C
PM-8203	1:2	2CT:1	1.5	1.2	35	1-2,9-10,11-12,19-20	3-5,6-8,13-15,16-18	D
PM-8204	1:1.36	1:1	1.5	1.0	35	1-2,6-7,11-12,16-17	38-37,33-32,28-27,23-22	F
PM-8205	1:2	1:1	1.5	1.0	35	1-2,6-7,11-12,16-17	38-37,33-32,28-27,23-22	F
PM-8206	1:1.15	1:1	1.5	1.0	35	1-2,6-7,11-12,16-17	38-37,33-32,28-27,23-22	F
PM-8207	1:2.40	1:1	1.5	1.0	35	1-2,8-9,11-12,18-19	38-37,35-34,28-27,25-24	F
PM-8208	1:2CT	1CT:2	1.5	0.8	35	4-5,9-10,14-15,19-20	1-3,6-8,11-13,16-18	C
PM-8209	1:2	1:2	1.5	0.8	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	E
PM-8210	1:1.15	1:1.15	1.5	0.8	35	1-3,6-8,11-13,16-18	4-5,9-10,14-15,19-20	E

Specifications subject to change without notice.

pm-81_82 07/00

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T1/E1 QUAD PORT SMD ISOLATION TRANSFORMERS

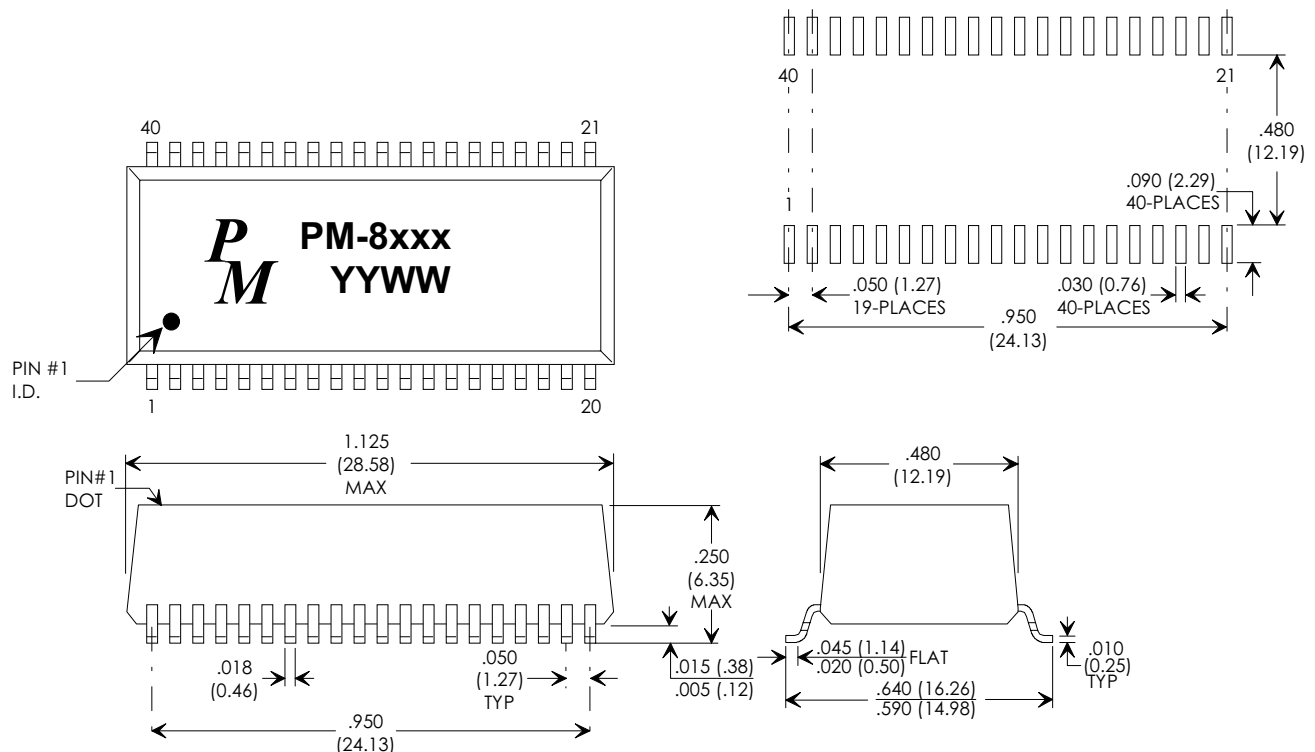
EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRI OCL TX&RX (mH TYP.)	PRI - SEC TX&RX L _L (μH Max.)	PRI - SEC Cw/w (pf Max.)	PRIMARY PINS		Schematic
	TX	RX				TX	RX	
PM-8211	1:1.79	1:2	1.5	0.8	35	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37	B
PM-8212	1:1.15	1:2CT	1.5	0.8	35	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38	A
PM-8213	1CT:1.41	1CT:1.41	1.5	0.8	35	1-3,6-8,11-13,16-18	21-23,26-28,31-33,36-38	C
PM-8214	1:2CT	1:1CT	1.5	0.8	35	1-2,6-7,11-12,16-17	21-22,26-27,31-32,36-37	B
PM-8215	1:1.36CT	1:2CT	1.5	0.8	35	24-25,29-30,34-35,39-40	4-5,9-10,14-15,19-20	C
PM-8216	1:2	1:2CT	1.5	0.8	35	1-2,9-10,11-12,19-20	23-25,26-28,33-35,36-38	D
PM-8217	1:2CT	1:2CT	1.5	0.8	35	4-5,9-10,14-15,19-20	24-25,29-30,34-35,39-40	C
PM-8218	1:1.14	1:1.14CT	1.5	0.8	35	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38	A
PM-8219	1:1.36	1:1.36CT	1.5	0.8	20	1-2,6-7,11-12,16-17	21-23,26-28,31-33,36-38	A
PM-8220	1CT:1.0	1CT:1.0	1.2	0.8	35	1-3,6-8,11-13,16-18	38-36,33-31,28-26,23-21	C

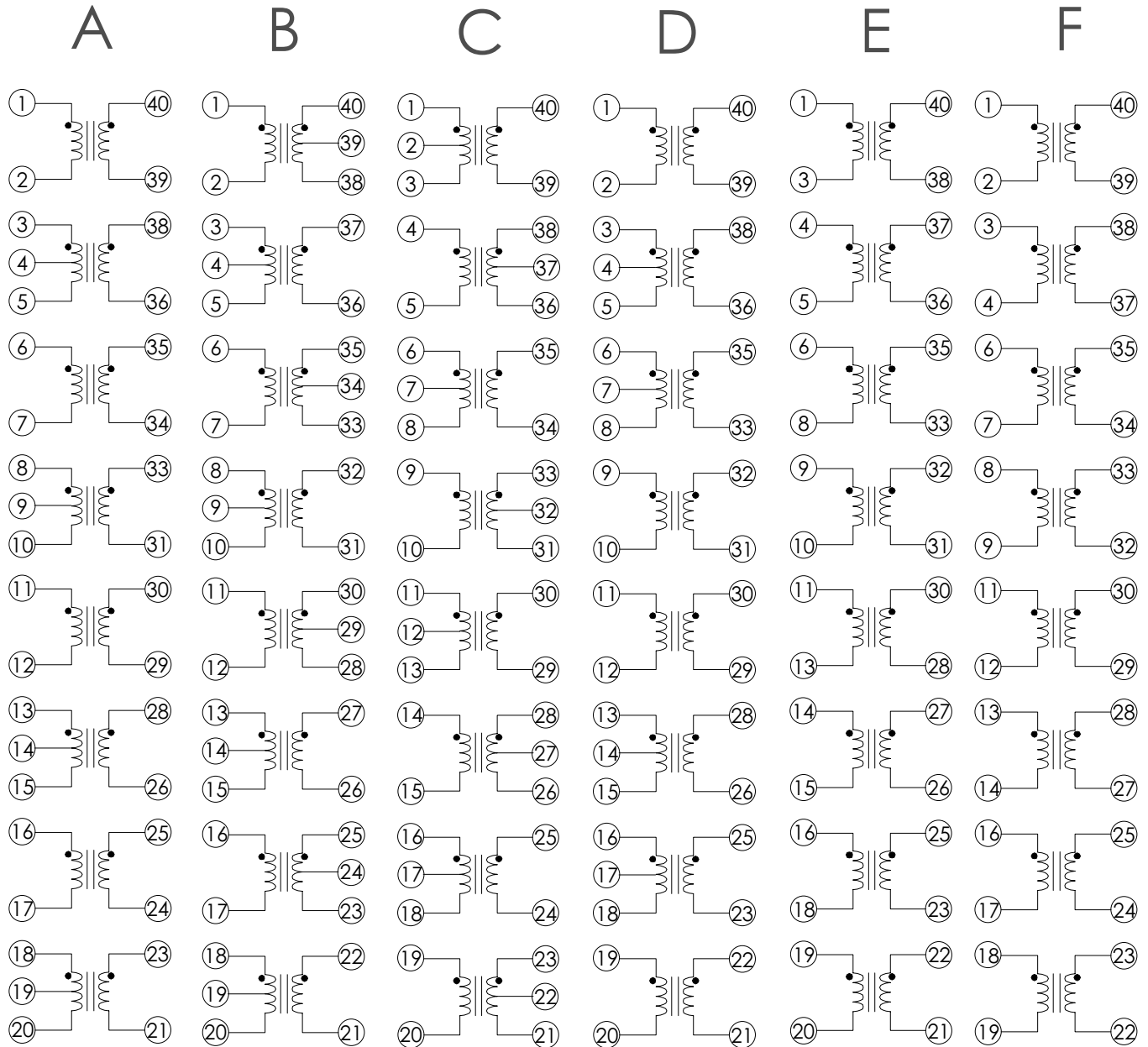
PM-8xxx MECHANICAL

PM-8xxx PCB LAYOUT



T1/E1 QUAD PORT SMD ISOLATION TRANSFORMERS

PM-8XXX SCHEMATICS



T1/E1/ISDN-PRI Quad Port SMD Transformer with IC Side Protection

- ① IC Side Protection Circuit on Each Channel to Suppress Low Voltage Transients
- ② Compatible with PMC-Sierra's Comet Chip (PM4354)
- ③ Industry Standard SMD Package Meets 235°C IR Reflow
- ④ 1500Vrms Minimum Isolation Voltage

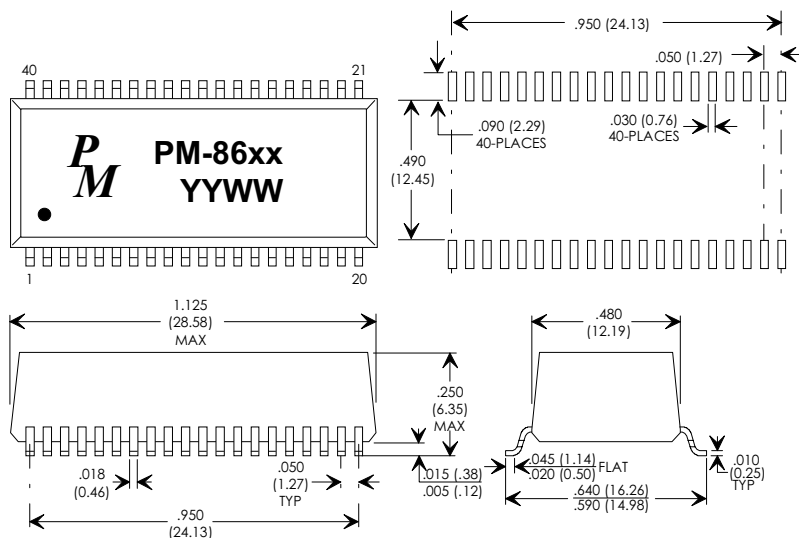
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRI OCL TX&RX (mH TYP.)	LEAKAGE TX&RX (μH Max.)	Cw/w TX&RX (pf Max.)	DCR TX&RX (Ohm Max.)	Schematic
	TX	RX					
PM-8601	1 : 2.42	1 : 2.42	0.6 & 0.6	0.6 & 0.6	35 & 35	--- & ---	1

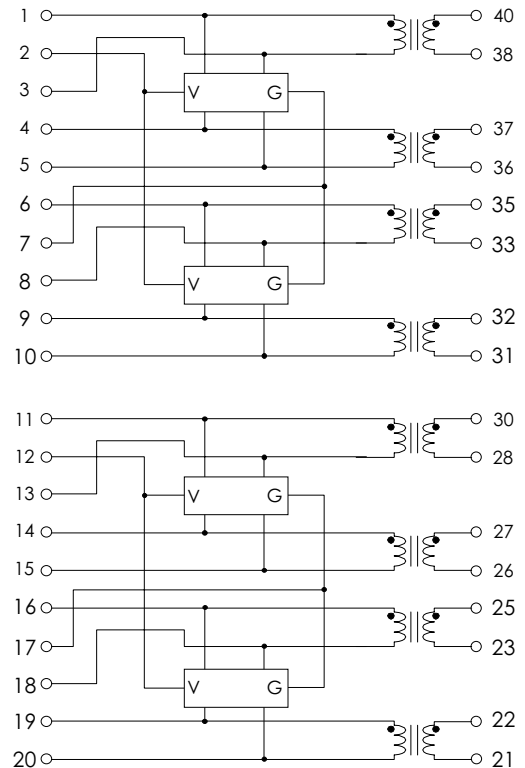
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 3%)		PRI OCL TX&RX (mH TYP.)	LEAKAGE TX&RX (μH Max.)	Cw/w TX&RX (pf Max.)	DCR TX&RX (Ohm Max.)	Schematic
	TX	RX					
PM-8610	1 : 2.42	1 : 2.42	0.6 & 0.6	0.6 & 0.6	35 & 35	.70 & .40	1
PM-8611	1 : 2.42	1 : 2.42	0.6 & 0.6	0.6 & 0.6	35 & 35	.70 & 1.30	1
PM-8612	1 : 1.2	1 : 1.2	1.2 & 1.2	0.5 & 0.5	30 & 30	--- & ---	1

PM-86xx MECHANICAL



SCHEMATICS



Specifications subject to change without notice.

pm-86xx 05/04

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T3/DS3/E3/STS-1 ISOLATION TRANSFORMERS

- ① Optimized for use with T3/DS3/E3/STS-1 Links
- ② 1500/3000Vrms Minimum Isolation Voltages
- ③ Bandwidths up to 500MHz
- ④ Rates of 44.736 MBPS Using B3ZS Code
- ⑤ Rates of 34.368 MBPS Using HDB3 Code
- ⑥ 6-Pin Through-Hole or SMD Packages

The characteristics of these parts will allow the pulse templates of CCITT G.703 & ATT T.A.34 to be met

NORMAL TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	TURNS RATIO (± 2%)	PRI INDUCTANCE (μH Min.)		PRI - SEC Cw/w (pf Max.)	PRI - SEC L _L (μH Max.)	PACKAGE	SCHEMATIC	Bandwidth 75Ω System (MHz Typ)	HI-POT (Vrms MIN.)
		@ +25°C	@ -40°C						
PM-T301	1:2CT	35	20	10	.12	A6	B	-----	1500
PM-T302	1:1	40	30	13	.12	A6	A	-----	1500
PM-T303	1:2CT	35	20	10	.12	G6	B	-----	1500
PM-T304	1:1	40	30	13	.12	G6	A	-----	1500
PM-T306	1:1.73CT	50	----	12	.10	L6	B	.060-300	1500
PM-T307	1:1	40	----	10	.10	L6	A	.200-340	1500
PM-T308	1:2CT	19	----	10	.06	L6	B	.250-500	1500
PM-T309	1CT:1CT	40	----	10	.10	L6	C	.200-340	1500
PM-T310	1:1.73CT	50	----	15	.10	T7	C	.060-300	1500
PM-T311	1:1	40	----	15	.06	T7	A	.200-340	1500
PM-T312	1:2CT	19	----	15	.06	T7	C	.250-500	1500
PM-T313	1.2:1	40(2)	----	10	.10	L6	D	.200-340	1500
PM-T314	1.2:1	40	----	10	.10	L6	A	.200-340	1500
PM-T329	1:1	40	----	5	.10	T6	A	-----	3000 ⁽¹⁾
PM-T330	1:2CT	19	----	10	.06	T6	D	-----	3000 ⁽¹⁾

(1) 3000Vrms Reinforced insulation per BABT EN41003/EN60950

(2) Inductance test on pin 6-4 side.

EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (± 2%)	PRI INDUCTANCE (μH Min.)		PRI - SEC Cw/w (pf Max.)	PRI - SEC L _L (μH Max.)	PACKAGE	SCHEMATIC	Bandwidth 75Ω System (MHz Typ)	HI-POT (Vrms MIN.)
		@ +25°C	@ -40°C						
PM-T3017	1:1	100	40	10	.110	L6	A	.200-340	1500
PM-T3018	1:2CT	40	19	12	.110	L6	B	.250-500	1500
PM-T3019	1CT:1CT	40	----	12	.110	L6	C	.200-340	1500
PM-T3020	1:1	40	----	15	.10	T7	A	.200-340	1500
PM-T3021	1:2CT	19	----	12	.08	T6	D	-----	3000 ⁽¹⁾
PM-T3022	1:1.15	40	----	15	.10	T7	A	.200-340	1500
PM-T3023	1:1.5	40	----	15	.10	T7	A	.200-340	1500

(1) 3000Vrms Reinforced insulation per BABT EN41003/EN60950

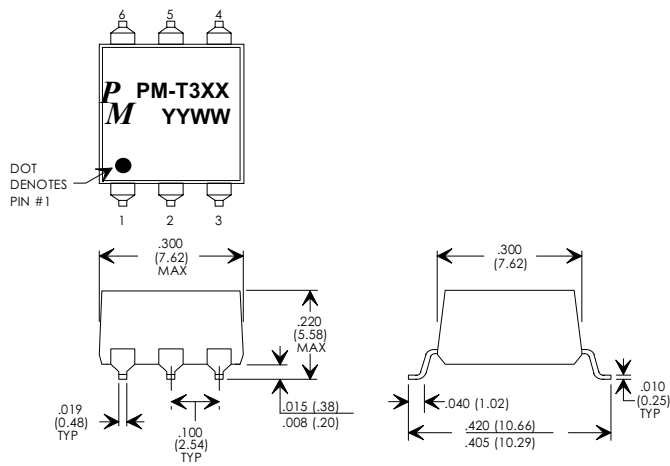
Specifications subject to change without notice.

pmt3 5/99

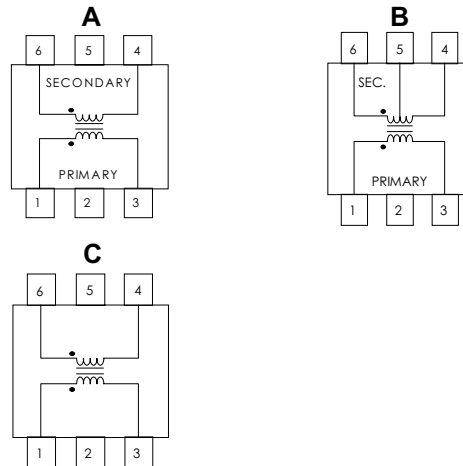
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T3/DS3/E3/STS-1 ISOLATION TRANSFORMERS

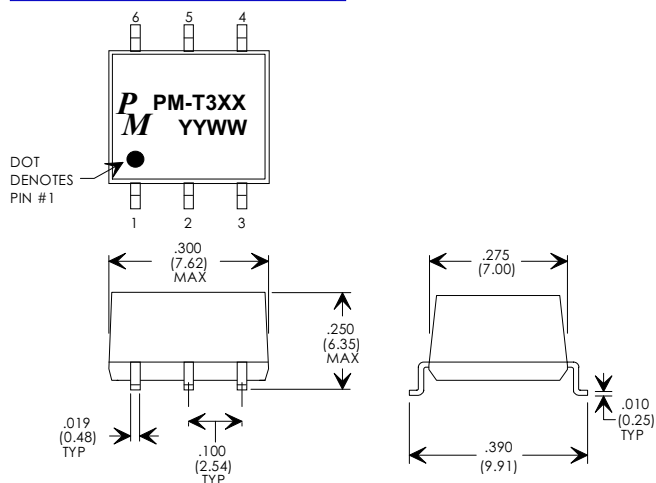
G6 MECHANICALS



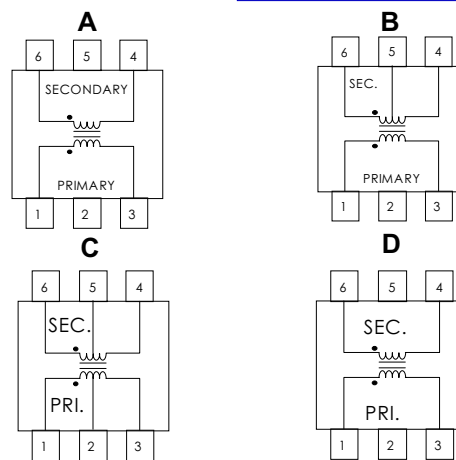
G6 SCHEMATICS



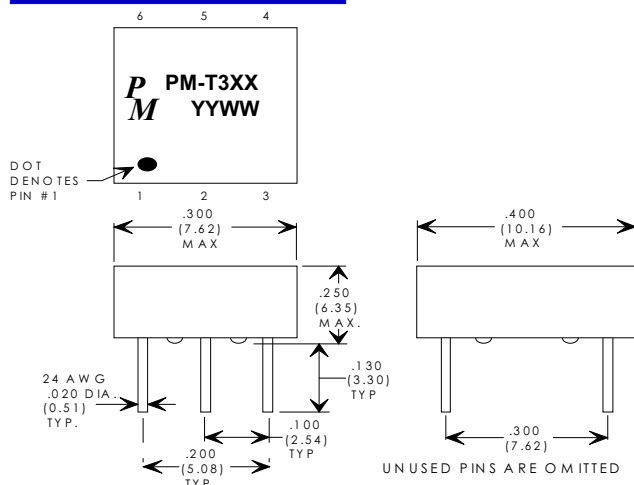
L6 MECHANICALS



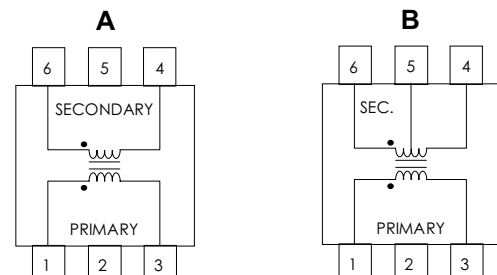
L6 SCHEMATICS



A6 MECHANICALS



A6 SCHEMATICS

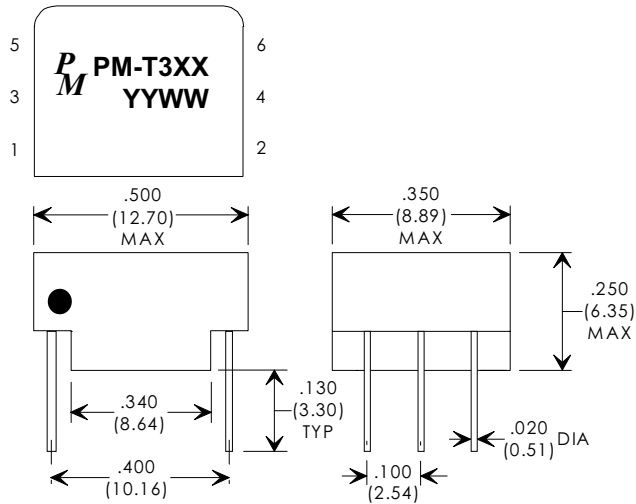


Specifications subject to change without notice.

pmt3 5/99

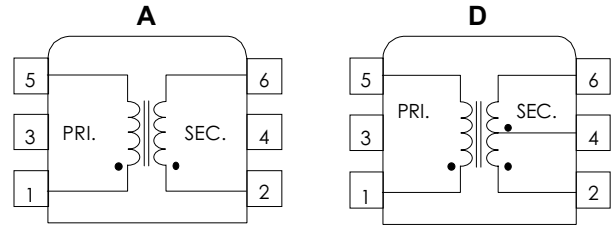
T3/DS3/E3/STS-1 ISOLATION TRANSFORMERS

T6 MECHANICALS

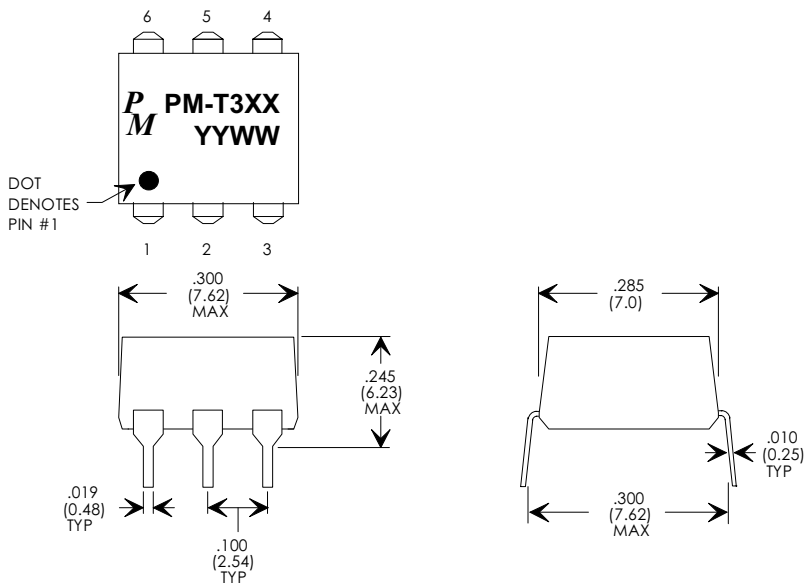


UNUSED PINS ARE OMITTED

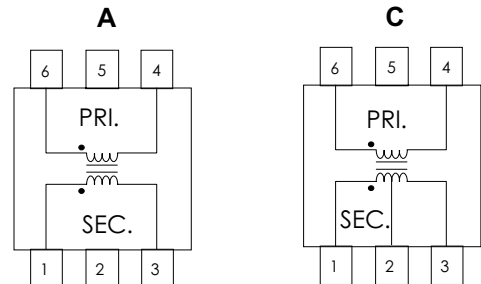
T6 SCHEMATICS



T7 MECHANICALS



T7 SCHEMATICS



10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

- ① Designed for IEEE 802.3 10 Base-T
- ② Compact Standard DIL or SIP Packages
- ③ Performs Impedance Match + Filtering + Isolation
- ④ 2000Vrms Minimum Isolation Voltage
- ⑤ Low Insertion Loss
- ⑥ Designed For Use With Most 10 Base T Chips

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

DIL (DUAL IN-LINE) THRU-HOLE

PART NUMBER	Insertion Loss 1 to 10MHz (dB Max)		Return Loss 1 to 10MHz (dB Min.)	Crosstalk to 10MHz (dB Min.)	Group Delay Change (ns Max.) 5-10MHz	Attenuation (dB Min)								Cut Off MHz TYP	Pri to Sec Isolation (Vrms Min)	Schematic
						20MHz		25MHz		30MHz		40MHz				
	Tran.	Rcv				T	R	T	R	T	R	T	R			
PM-BT01	1.0	1.0	15	30	4.0	7	6	19	14	32	20	35	31	17	2000	A
PM-BT02	4.6	4.2	15	30	4.0	7	6	19	14	32	20	35	31	17	2000	B
PM-BT03 ¹	1.0	1.0	15	30	4.0	7	6	19	14	32	20	35	31	17	2000	C
PM-BT04 ^{1,2}	4.5	1.0	15	35	2.0	7	5	18	11	30	16	33	26	17	2000	D
PM-BT05 ¹	1.0	1.0	15	35	2.0	7	5	18	11	30	16	33	26	17	2000	E
PM-BT06 ¹	1.0	1.0	15	30	4.0	7	6	19	14	32	20	35	31	17	2000	F
PM-BT07 ¹	1.0	1.0	15	30	4.0	7	6	19	14	32	20	35	31	17	2000	G

SIP (SINGLE IN-LINE) THRU-HOLE

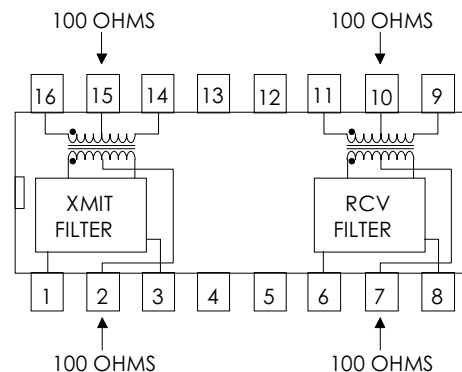
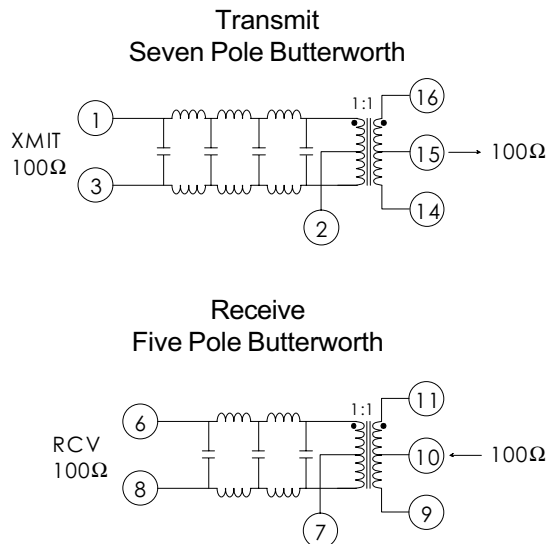
PART NUMBER	Insertion Loss to 10MHz (dB Max)	Return Loss .1 to 10MHz (dB Min.)		Crosstalk (dB Min.) MHz		Group Delay Change 5-10MHz (ns Max.)	Attenuation (dB Min @ MHz)			Common mode rejection (dB Min) MHz			Pri to Sec Isolation (Vrms Min)	Schematic
		100 Ω	98±13 Ω	5-10	10-50		30		50-100					
							T	R	T or R		5-10	50		
PM-BT434 ⁽¹⁾	-1.0	-18	-15	-45	-40	4.0	-37	-15	-40	-35	-60	-45	2000	F1

1 = INCLUDES COMMON MODE FILTER
2 = INCLUDES RESISTOR MATCHING NETWORK

PM-BT01 SCHEMATICS

SCHEMATIC "A"

SCHEMATIC "A"



10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

- ① Available in Enhanced or Standard Design Version
- ② 235°C Peak Infrared Reflow Temperature Rating
- ③ Extended Temperature Version *
- ④ Low Profile Surface Mount Package

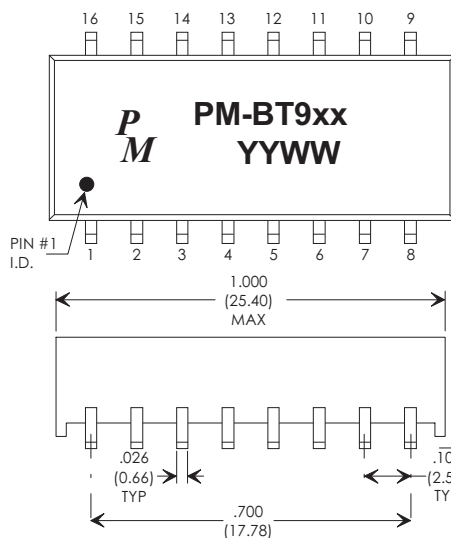
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	Insertion Loss 1 to 10MHz (dB Max)	Return Loss 1 to 10MHz (dB Min.)		Crosstalk to 10MHz (dB Min.)	Attenuation (XMIT) (dB Min)			Common Mode Rejection (dB Min)					Pri to Sec Isolation (Vrms Min)	Schematic
		100Ω	98 ±13Ω		30MHz	40MHz	100MHz	5MHz	10MHz	50MHz	100MHz	200MHz		
PM-BT91	-6.0	-18	-15	-35	-35	-35	-35	-60	-60	-55	-50	-45	1500	H
PM-BT92	-1.0	-18	-15	-35	-30	-35	-35	-60	-60	-55	-50	-45	1500	J
PM-BT93	-6.5	-18	-15	-35	-35	-35	-35	-42	-37	-33	-45	-40	1500	H
PM-BT94	-1.0	-18	-15	-30	-30	-27	-27	-40	-30	-50	-45		1500	K
PM-BT95	-5.5	-18	-15	-30	-30	-30	-35	-35	-30	-55	-50		1500	L
PM-BT96	-6.0	-18	-15	-35	-30	-27	-27	-40	-35	-45	-30		1500	L
PM-BT97	-5.0	-18	-15	-25	-30	-35	-40	-35	-30	-55	-50		1500	L
PM-BT98	-5.0	-18	-15	-25	-30	-35	-40	-35	-30	-55	-50		1500	L
PM-BT99	-1.0	-18	-15	-35	-30	-27	-27	-40	-35	-45	-45		1500	K

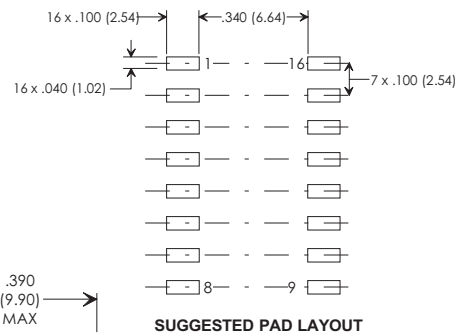
RESISTOR VALUE (Ω)								
PART NUMBER	IC Manufacturer	R1	R2	R3	R4	R5	R6	R7
PM-BT91	AMD	61.9	422	61.9	422	1210	49.9	49.9
PM-BT92	Various	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PM-BT93	National	274	66.5	66.5	274	806	49.9	49.9
PM-BT95	National	348	53.6	53.6	348	806	49.9	49.9
PM-BT96	AMD	61.9	422	61.9	422	1210	49.9	49.9
PM-BT97	LSI	390	63.4	390	63.4	N/A	49.9	49.9
PM-BT98	Motorola	39	N/A	39	N/A	N/A	49.9	49.9

* Note: For Extended Temperature version (-40°C to +85°C)
Add "E" at the end of part # example: PM-BTxxxE

PM-BT9XX PHYSICALS

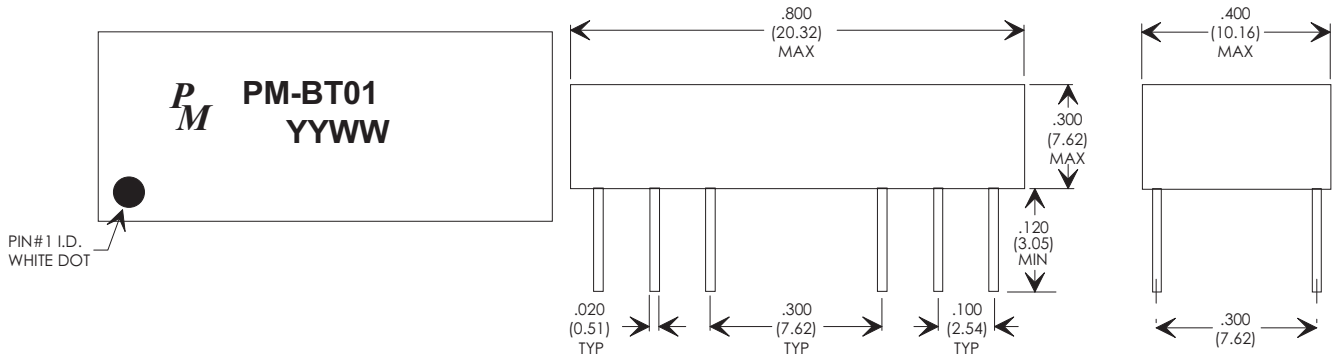


PCB LAYOUT



10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

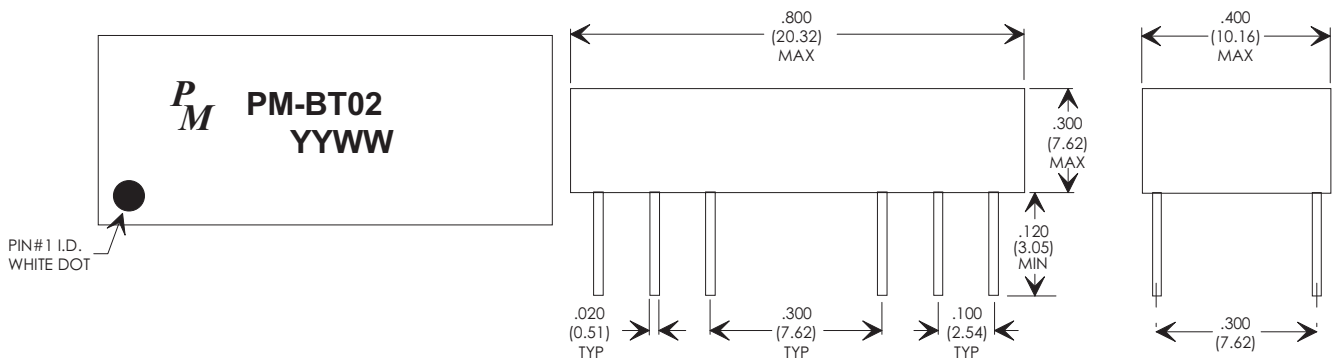
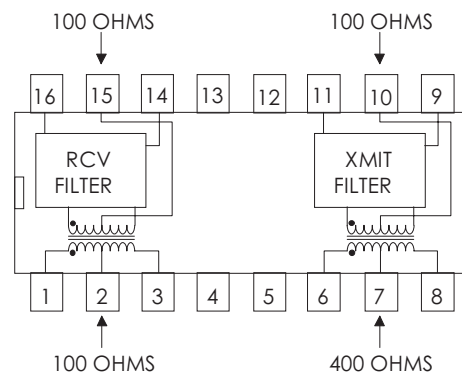
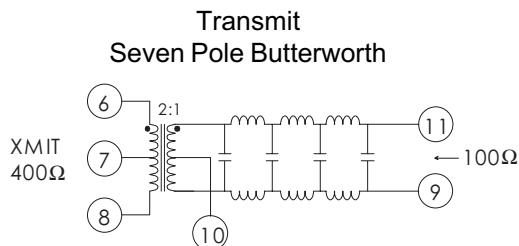
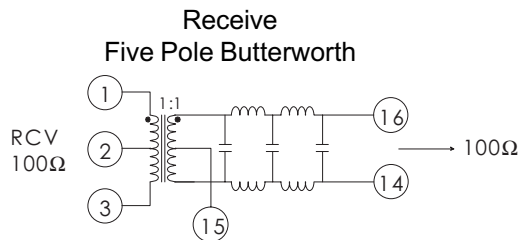
PM-BT01 MECHANICAL



PM-BT02 PHYSICALS

SCHEMATIC "B"

SCHEMATIC "B"



Specifications subject to change without notice.

pmbt 6/98

10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

PM-BT03 PHYSICALS

SCHEMATIC "C"

SCHEMATIC "C"

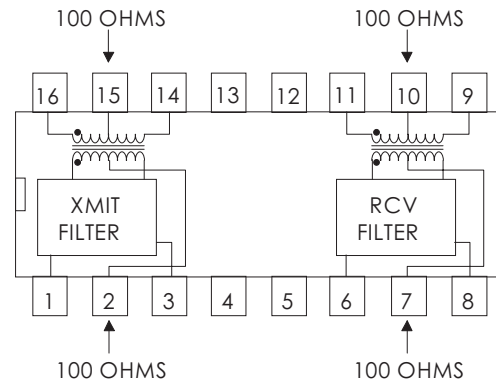
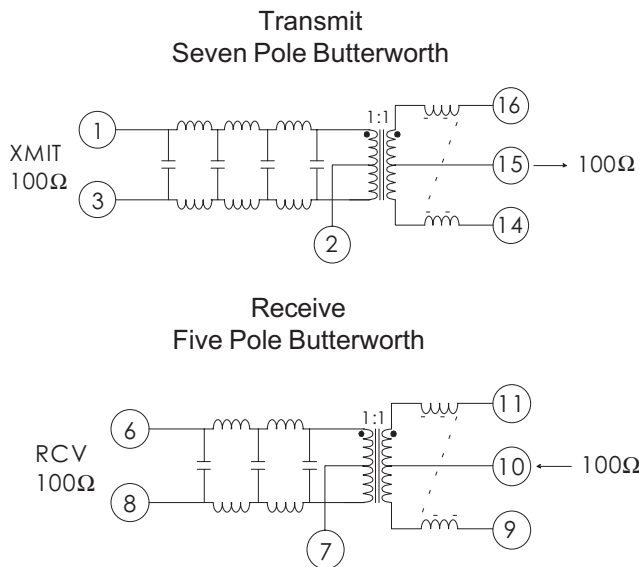
TYPICAL COMMON MODE CHOKE:

Inductance: 18 to 36 μ Hy

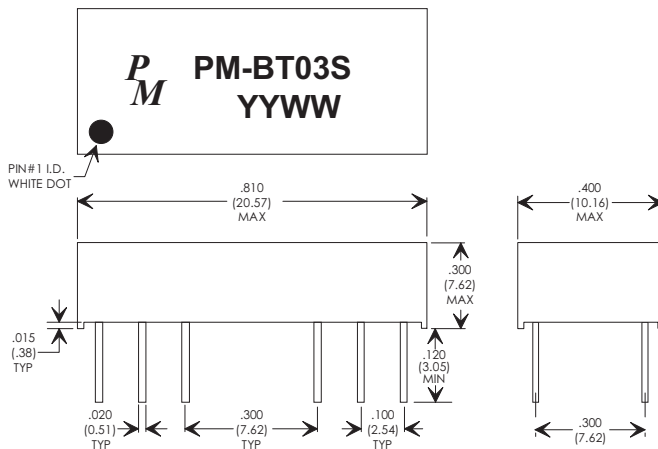
Leakage Inductance: <0.3 μ Hy Max.

Inter-Winding Capacitance: <25 pF Max.

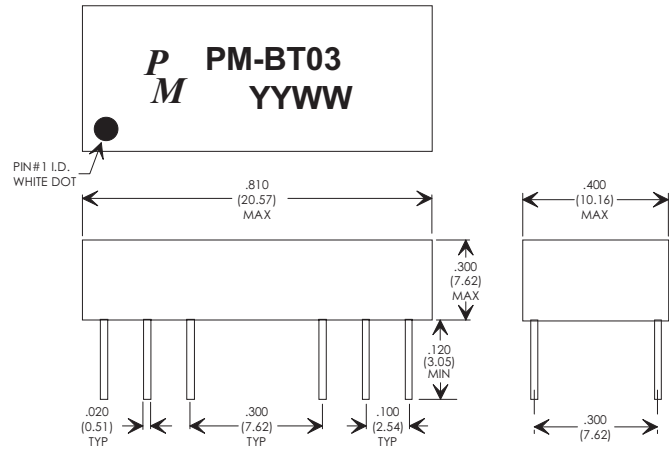
CMRR 10-100MHz >20db



PM-BT03S WITH STANDOFFS



PM-BT03 WITHOUT STANDOFFS



10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

PM-BT04/05 PHYSICALS

SCHEMATIC "D" & "E"

SCHEMATIC
"D" & "E"

COMMON MODE

REJECTION:

Transmit: 30dB min from 1 to 100MHz

Receive: 30dB min from 1 to 100MHz

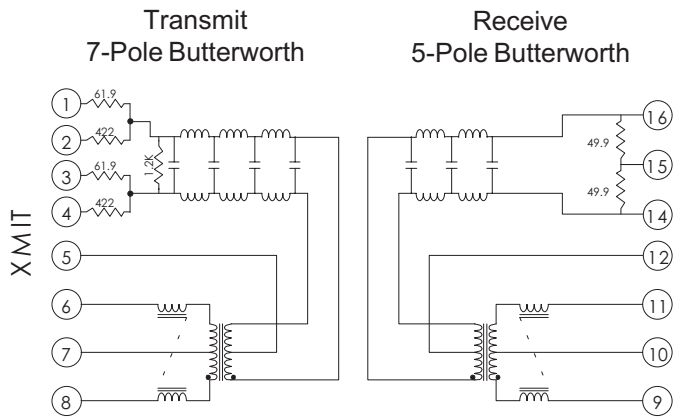
RETURN LOSS:

Transmit: 15dB min from 5 to 10MHz

Receive: 15dB min from 5 to 10MHz

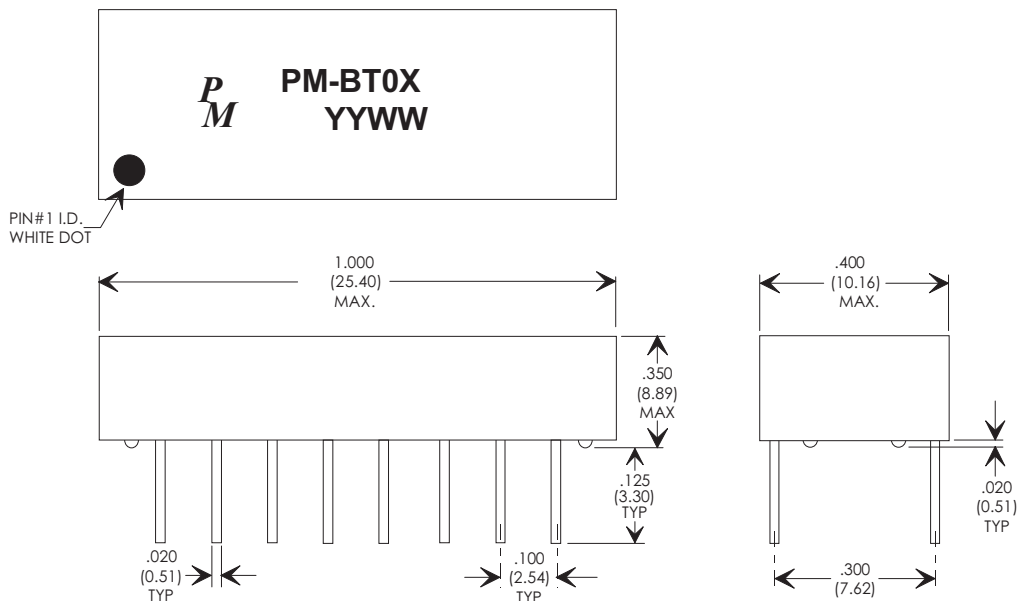
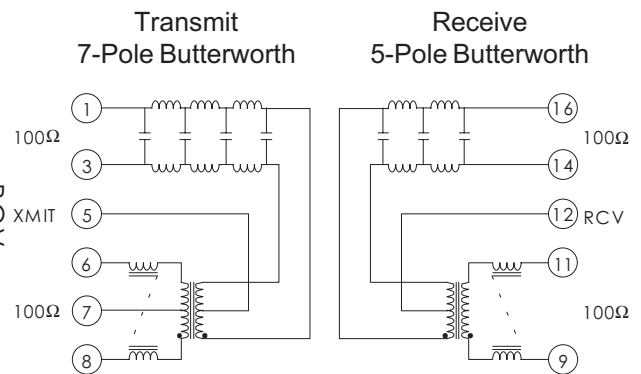
SCHEMATIC DIAGRAM

"D" = PM-BT04



SCHEMATIC DIAGRAM

"E" = PM-BT05



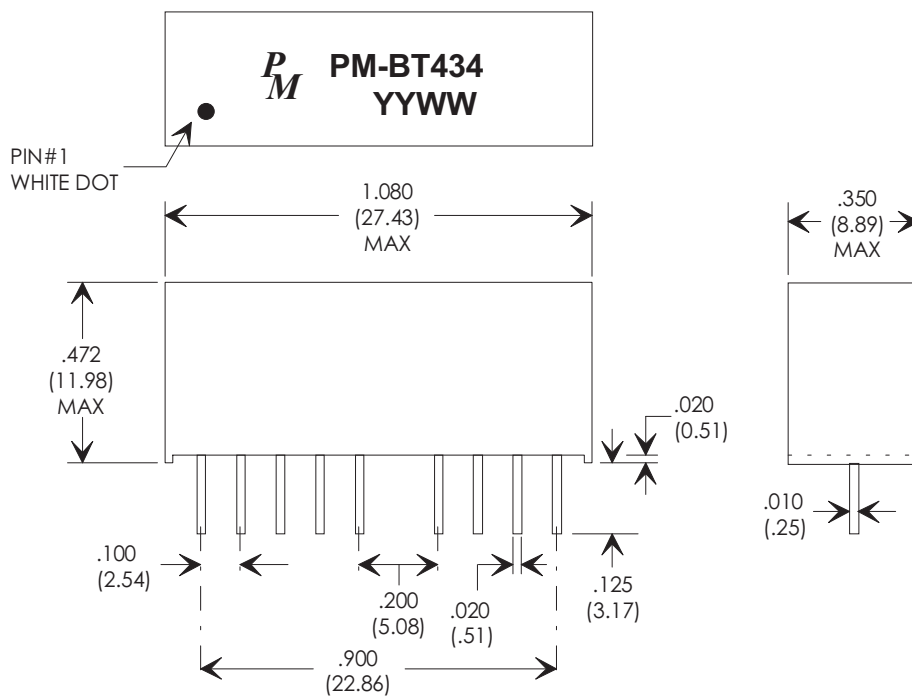
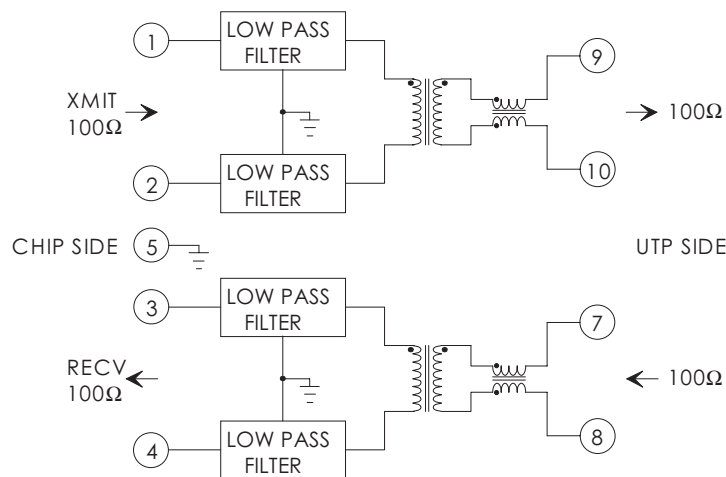
10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

PM-BT434 PHYSICALS

SCHEMATIC
"F1"

SCHEMATIC "F1"

SCHEMATIC DIAGRAM



10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

PM-BT06 PHYSICALS

SCHEMATIC "F"

SCHEMATIC "F"

TYPICAL COMMON MODE CHOKE:

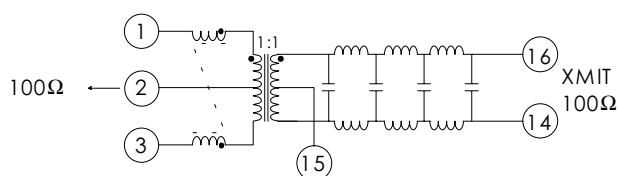
Inductance: 18 to 36 μ Hy

Leakage Inductance: <0.3 μ Hy Max.

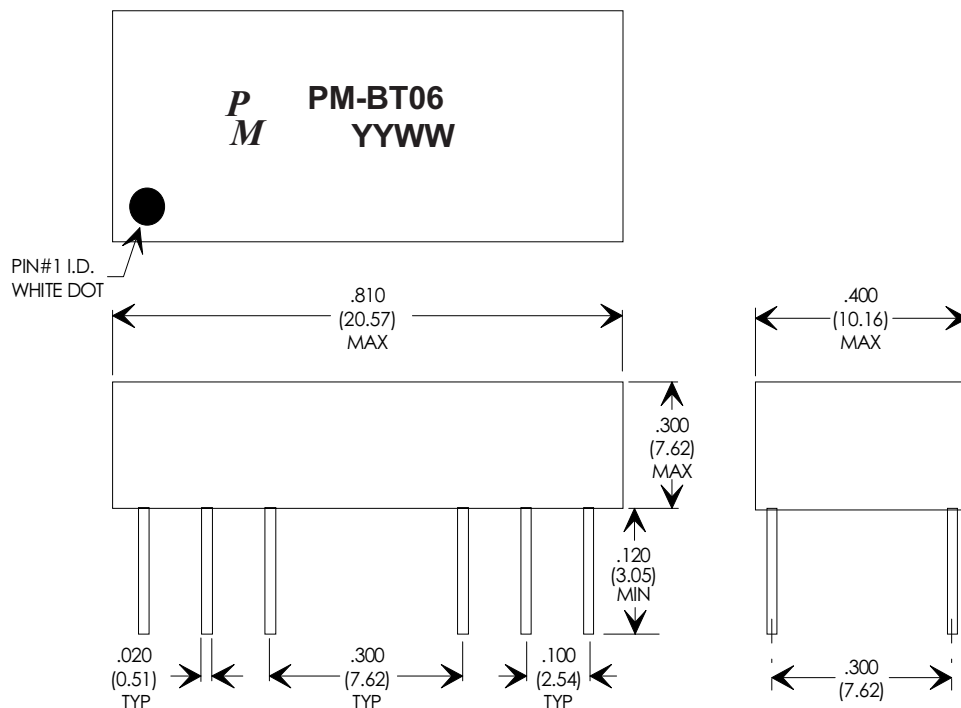
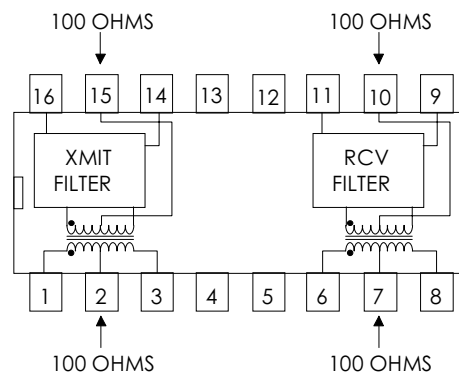
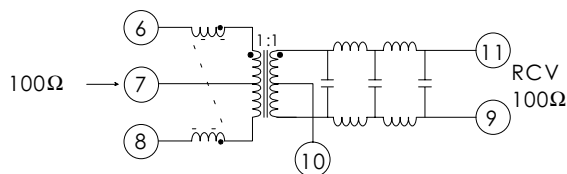
Inter-Winding Capacitance: <25 pF Max.

CMRR 10-100MHz >20db

Transmit Seven Pole Butterworth



Receive Five Pole Butterworth



Specifications subject to change without notice.

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10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

PM-BT07 PHYSICALS

SCHEMATIC "G"

SCHEMATIC "G"

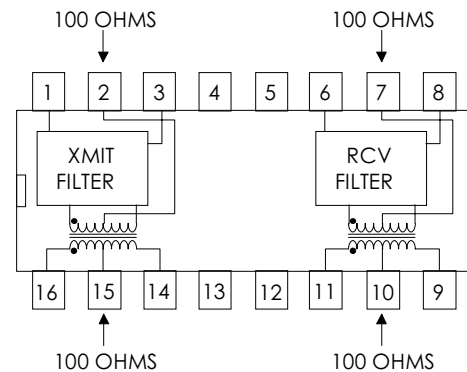
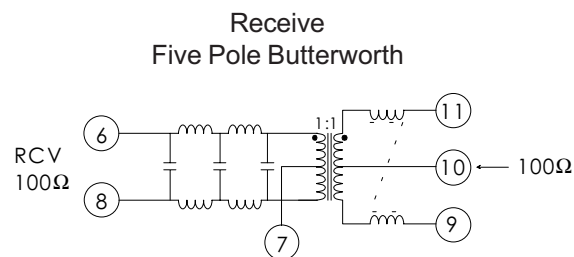
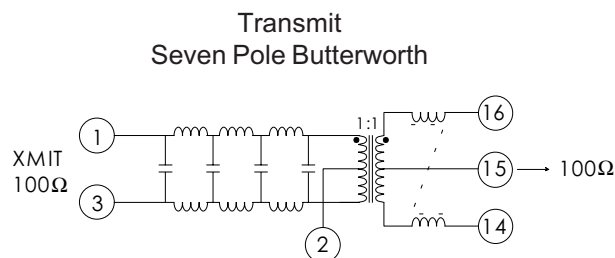
TYPICAL COMMON MODE CHOKE:

Inductance: 18 to 36 μ Hy

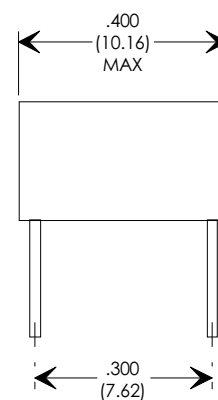
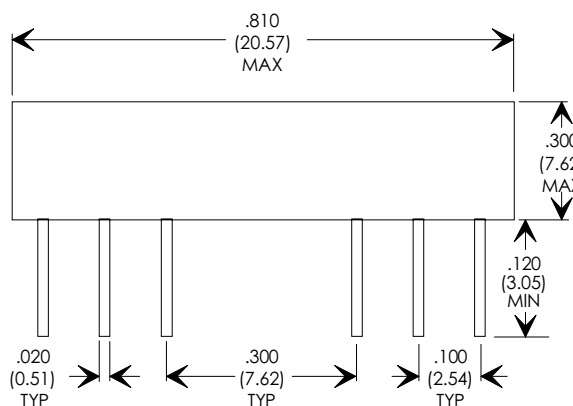
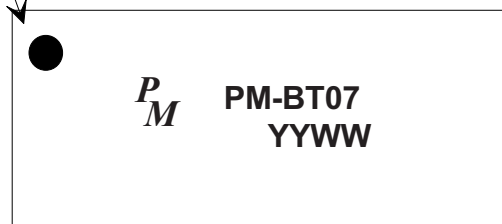
Leakage Inductance: <0.3 μ Hy Max.

Inter-Winding Capacitance: <25 pF Max.

CMRR 10-100MHz >20db

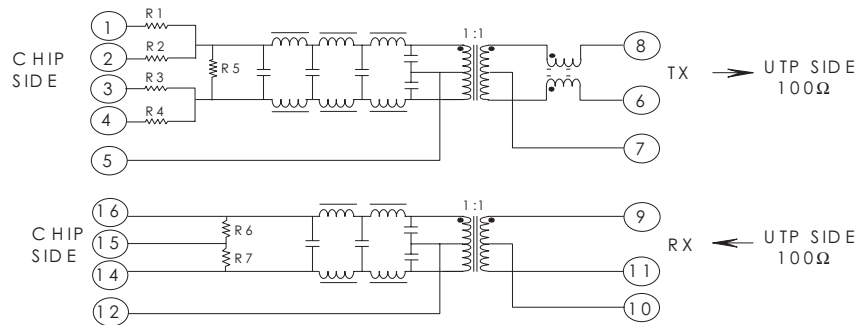


PIN#1 I.D.
WHITE DOT

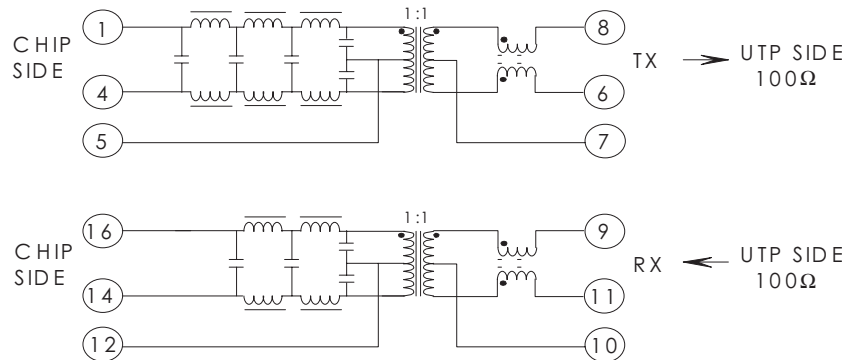


10 Base-T DUAL INTERFACE MODULES TRANSFORMERS & FILTERS

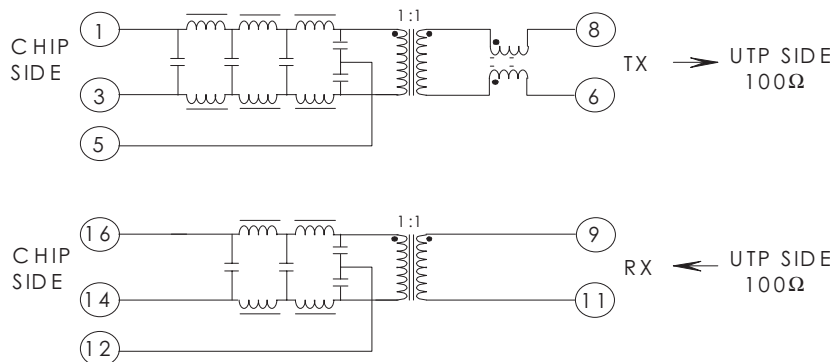
PM-BT9xx SCHEMATIC " H "



PM-BT9xx SCHEMATIC " J "

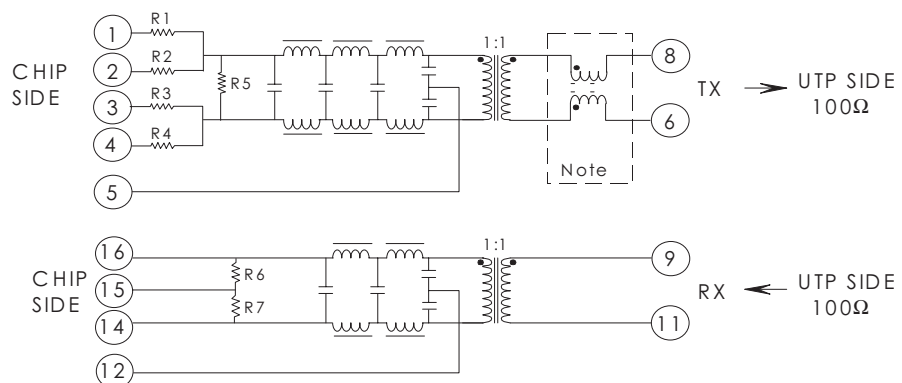


PM-BT9xx SCHEMATIC " K "



* Turn Ratio for transmit: PM-BT94 is 1:1, PM-BT99 is 1:1.414

PM-BT9xx SCHEMATIC " L "



* Note: Common Mode Choke on Transmit Channel for PM-BT95, PM-BT96, PM-BT97

Specifications subject to change without notice.

pmbt 6/98



10/100 Base-TX QUAD PORT ISOLATION TRANSFORMERS WITH FILTERS

- ① Designed for 10/100MB/s Transmission Over UTP-5 Cable, IEEE 802.3u & ANSI X3.236-1995
- ② Maintains $\geq 350\mu\text{H}$ Primary OCL with an 8mA Bias Over the Full Temp Range of 0°C to $+70^{\circ}\text{C}$
- ③ Supports All Leading Fast Ethernet Chip Sets That Require a 1:1 Transmit & Receive Turns Ratio
- ④ Provides the Cable Interface, Isolation & Common Mode Filtering Required by the PMD Sublayer
- ⑤ Low Profile Surface Mount Transfer Molded Package Meets UL94-V0
- ⑥ All Units Meet 1500Vrms Isolation

NORMAL TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO $+70^{\circ}\text{C}$

PART NUMBER	INSERTION LOSS (dB Typ) 0.1 to 100MHz	Cross Talk (dB Typ)				Return Loss (dB Typ)				Diff to Com Mode Rejection (dB Typ)		Com to Com Mode Rejection (dB Typ) 0.1 to 60 MHz	
		1 MHz	30 MHz	60 MHz	100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1-60 MHz	60-200 MHz	Transmit	Receive
PM-8036	-0.5	-65	-55	-45	-35	-22	-18	-15	-12	-40	-30	-30	-30
PM-8044	-0.5	-65	-55	-45	-35	-22	-18	-15	-12	-40	-30	-30	-30
PM-8053	-0.5	-65	-50	-40	-30	-22	-18	-15	-12	-40	-30	-30	-30
PM-8060	-0.5	-65	-50	-40	-30	-22	-18	-15	-12	-40	-30	-30	-30
PM-8062	-0.5	-65	-55	-45	-35	-22	-18	-15	-12	-40	-30	-30	-30
PM-8071	-0.5	-65	-50	-40	-30	-22	-18	-15	-12	-40	-30	-30	-30
PM-8072	-1.0 *	-55	-45	-40	-25	-18	-14.4	-13.1	-12	-37	-25	-----	-----

* Maximum

EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO $+85^{\circ}\text{C}$

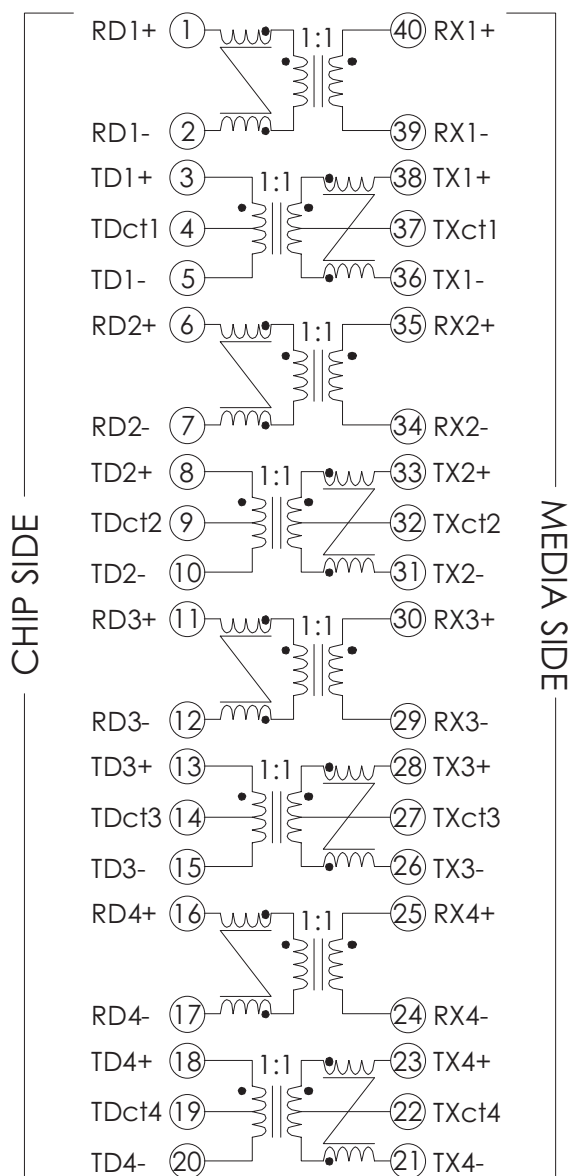
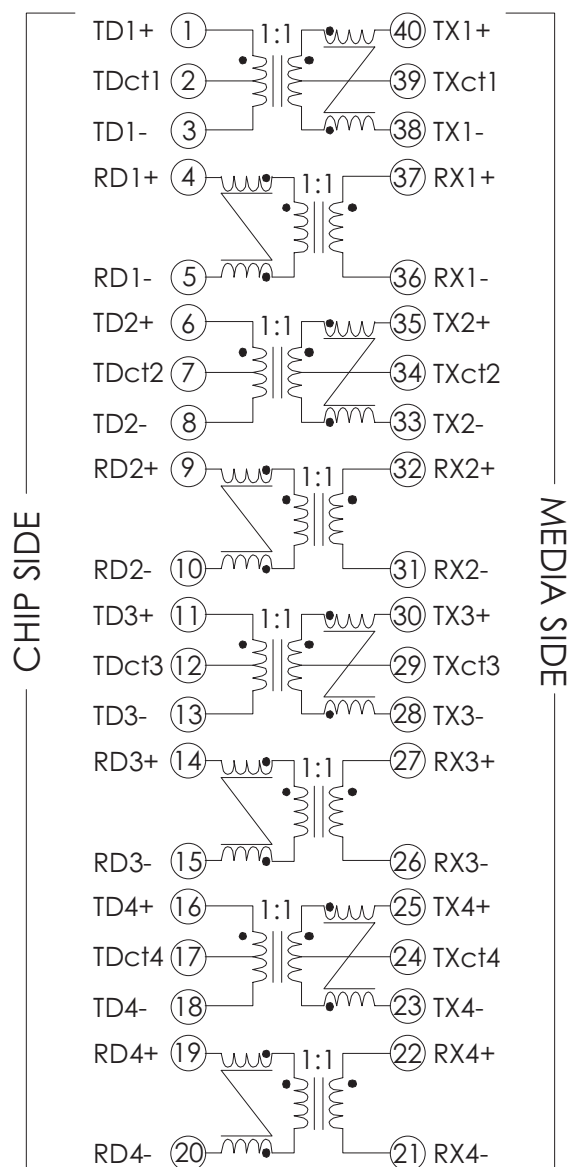
PART NUMBER	INSERTION LOSS (dB Typ) 0.1 to 100MHz	Cross Talk (dB Typ)				Return Loss (dB Typ)				Diff to Com Mode Rejection (dB Typ)		Com to Com Mode Rejection (dB Typ) 0.1 to 60 MHz	
		1 MHz	30 MHz	60 MHz	100 MHz	2-30 MHz	40 MHz	50 MHz	60-80 MHz	1-60 MHz	60-200 MHz	Transmit	Receive
PM-8080	-0.5	-65	-55	-45	-35	-22	-18	-15	-12	-40	-30	-30	-30
PM-8081	-0.5	-65	-55	-45	-35	-22	-18	-15	-12	-40	-30	-30	-30
PM-8082	-0.5	-65	-50	-40	-30	-22	-18	-15	-12	-40	-30	-30	-30
PM-8083	-0.5	-65	-50	-40	-30	-22	-18	-15	-12	-40	-30	-30	-30
PM-8084	-0.5	-65	-55	-45	-35	-22	-18	-15	-12	-40	-30	-30	-30
PM-8085	-0.5	-65	-50	-40	-30	-22	-18	-15	-12	-40	-30	-30	-30
PM-8086	-1.0 *	-55	-45	-40	-25	-18	-14.4	-13.1	-12	-37	-25	-----	-----

* Maximum

10/100 Base-TX QUAD PORT ISOLATION TRANSFORMERS WITH FILTERS

PM-8036 & PM-8080

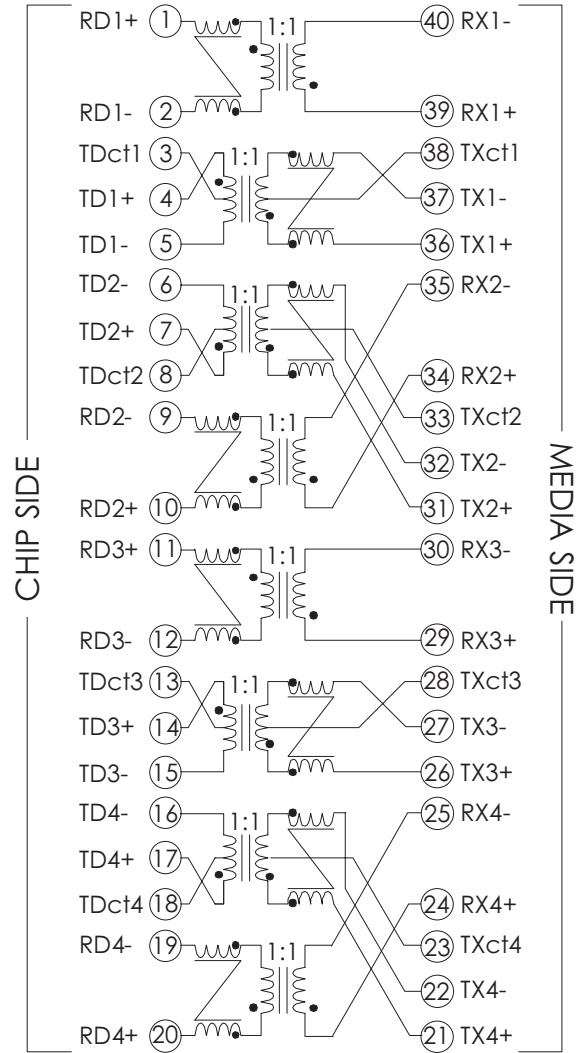
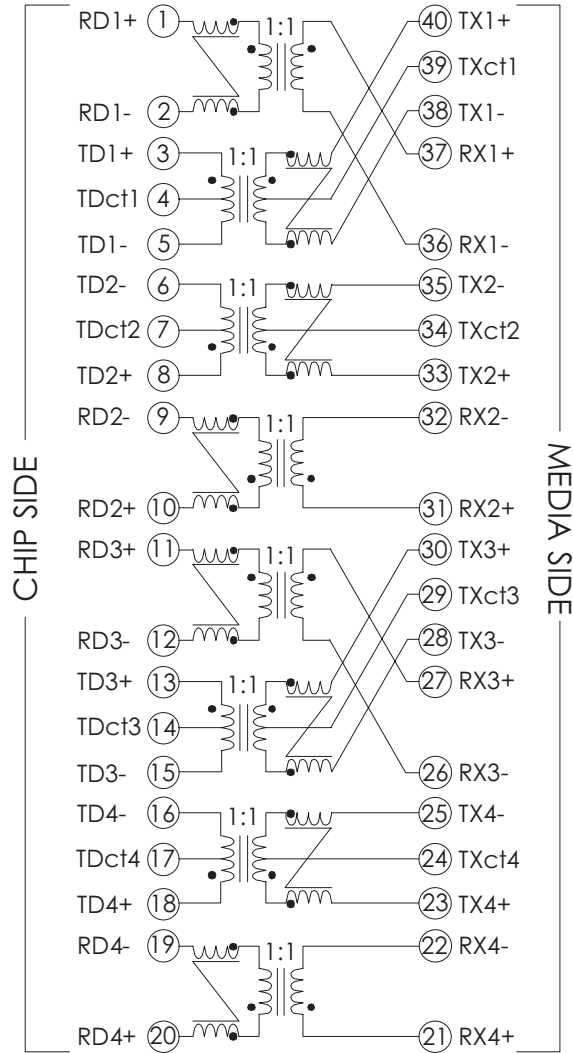
PM-8044 & PM-8081



10/100 Base-TX QUAD PORT ISOLATION TRANSFORMERS WITH FILTERS

PM-8053 & PM-8082

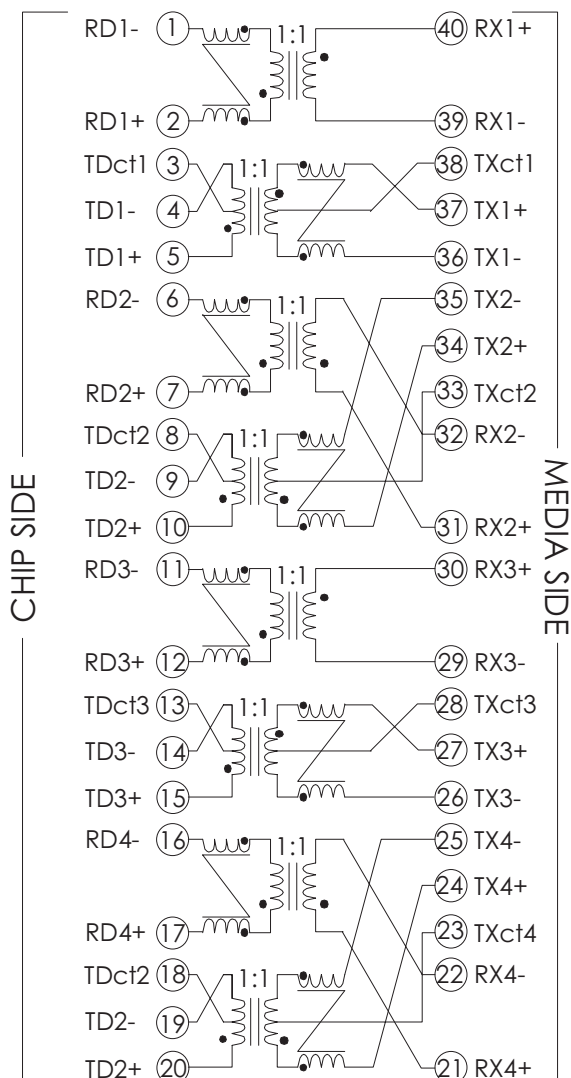
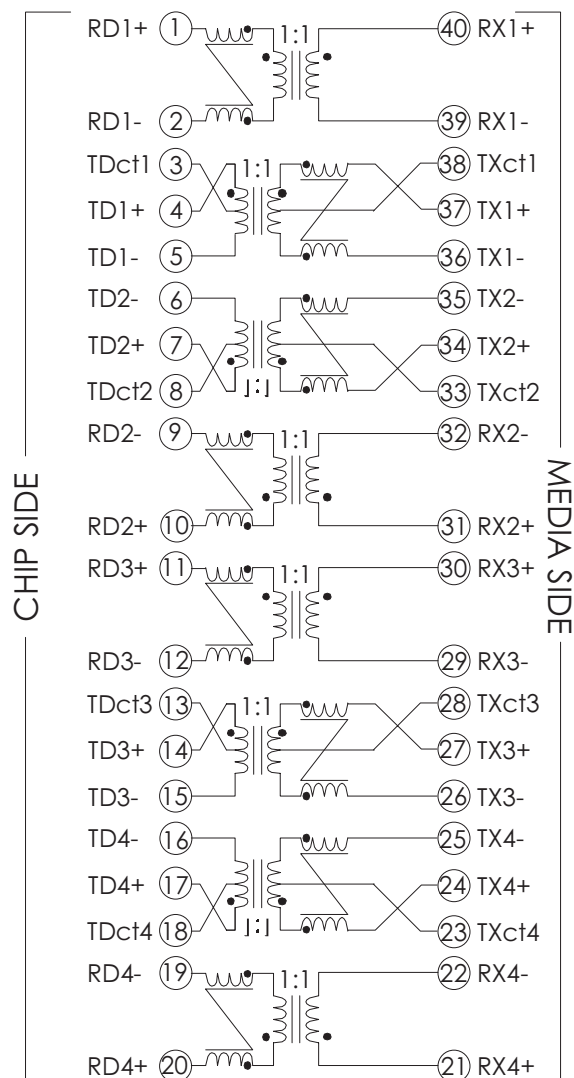
PM-8060 & PM-8083

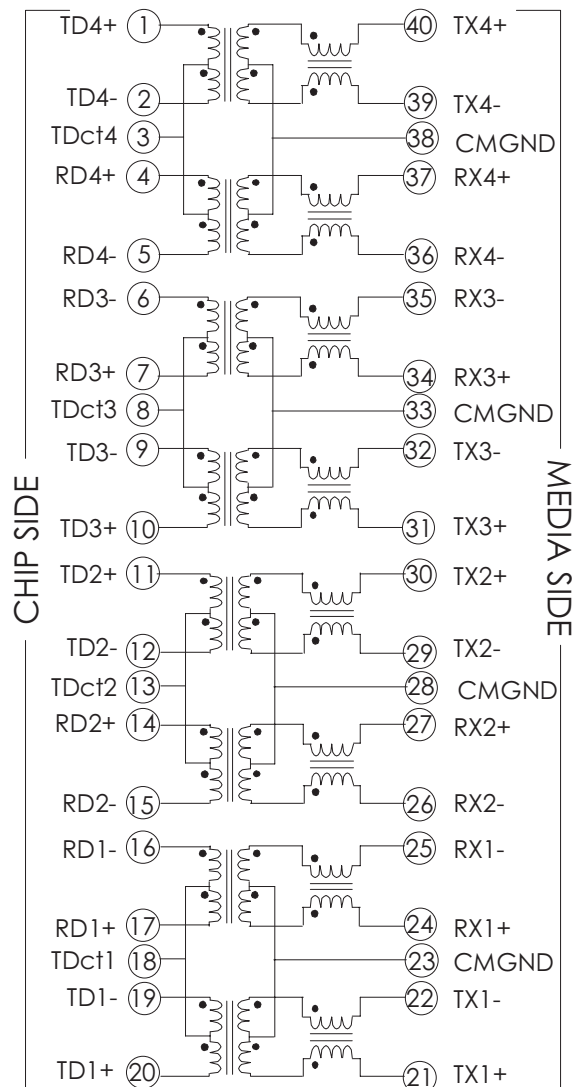


10/100 Base-TX QUAD PORT ISOLATION TRANSFORMERS WITH FILTERS

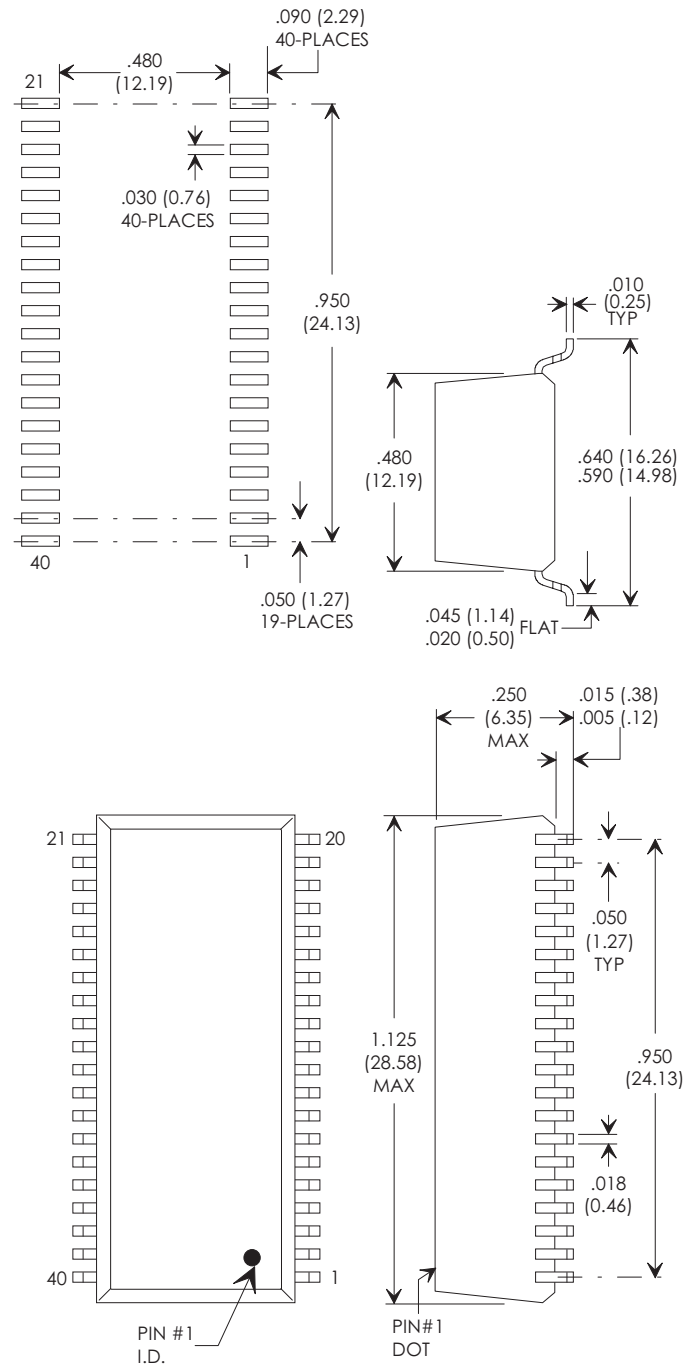
PM-8062 & PM-8084

PM-8071 & PM-8085





RECOMMENDED PCB LAYOUT





SMALL OUTLINE 10/100BASE-T ISOLATION TRANSFORMERS

FEATURES

- ① Designed for 10/100BASE-T Applications
- ② Compliant With IEEE 802.3 Standard
- ③ 1500 - 3000V IEC950 Isolation Voltages
- ④ Versions Available with or without CMC
- ⑤ Fast Rise Times

GENERAL SPECIFICATIONS:

Insertion Loss, 1 to 10MHz	-0.5dB Typ
Return Loss, 1 to 10MHz	-20dB Typ
CMRR, 1 to 10MHz	-50dB Typ
Differential to CMRR, 1 to 10MHz	-60dB Typ
Cross Talk, 1 to 10MHz	-45dB Min

NORMAL TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 5%)		PRIMARY OCL (μH Min.)	PRI / SEC L _L (μH Max.)	PRI-SEC Cw/w (pf Max.)	PRI DCR (Ω Max.)	Hi-Pot (Vrms)	CMC	Package/ Schematic
	RCV	XMIT							
PM-1001	1ct:1ct	1ct:1ct	150	0.17	20	0.30	2000	NO	G1/C
PM-1002	1:1	1:1.41	150	0.30	20	0.40	2000	NO	G1/B
PM-1003	1ct:1ct	1ct:1ct	200	0.40	20	0.40	2000	NO	G1/C
PM-1004	1ct:1ct	1ct:1.41ct	150	0.40	20	0.40	2000	YES	G1/D
PM-1005	1ct:1ct	1ct:1.41ct	150	0.30	20	0.40	2000	NO	G1/C
PM-1006	1ct:1ct	1ct:1ct	150	0.40	20	0.80	2000	YES	G1/D
PM-1007	1ct:2ct	1ct:1ct	150	0.40	20	0.80	2000	YES	G1/D
PM-1008	1ct:1ct	1ct:2ct	112	0.30	8/12	0.80	1500	YES	G1/E
PM-1011	1ct:1ct	1ct:2.50ct	150	0.30	20	0.40	2000	YES	G1/D
PM-1013	1ct:1ct	1ct:1.ct	150	0.30	20	0.40	1500	YES	G1/H
PM-1015	1ct:1ct	1ct:2ct	140	0.40	15	0.30	2000	YES	G1/D

EXTENDED TEMP RANGE

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (PRI:SEC ± 5%)		PRIMARY OCL (μH Min.)	PRI / SEC L _L (μH Max.)	PRI-SEC Cw/w (pf Max.)	PRI DCR (Ω Max.)	Hi-Pot (Vrms)	CMC	Package/ Schematic
	RCV	XMIT							
PM-1009	1ct:1ct	1ct:2.50ct	180	0.40	20	0.40	2000	NO	G1/C
PM-1010	1ct:1ct	1ct:1.41ct	180	0.40	15	0.40	2000	YES	G1/D
PM-1012	1ct:2ct	1ct:1ct	note 3	0.30	20	1.0	1500	YES	G1/E
PM-1014	1ct:1ct	1ct:1.41ct	150	0.40	30	0.50	2000	NO	G1/C
PM-1020 ²	1:1	1:1	200	0.30	25	.030	2000	YES	A8/G
PM-3008 ¹	1ct:1ct	1ct:2ct	150	0.60	18	0.40/0.90	3KV IEC	YES	H1/E
PM-3009 ¹	1ct:1ct	1ct:1ct	150	0.50	20	0.90	3KV IEC	YES	H1/D

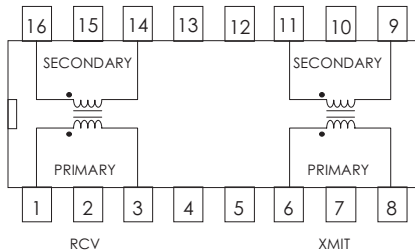
NOTES:

- 1) 3KV ISOLATION VERSIONS ARE BUILT TO UL1950, CSA950 & IEC950 REINFORCED INSULATION REQUIREMENTS
- 2) PM-1020 IS A QUAD DESIGN WITH COMMON MODE CHOKES.
- 3) OCL 1-3 = 50 μH Min., 9-11 = 200 μH Min.

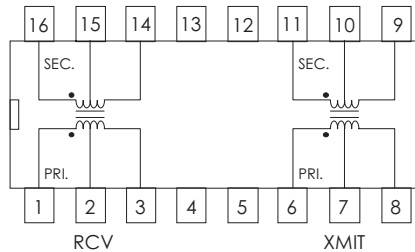
SMALL OUTLINE 10/100BASE-T ISOLATION TRANSFORMERS

SCHEMATICS

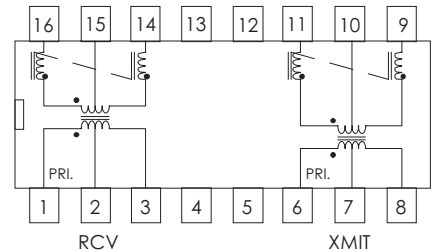
SCHEMATIC DIAGRAM "B"



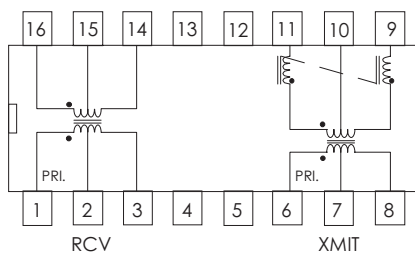
SCHEMATIC DIAGRAM "C"



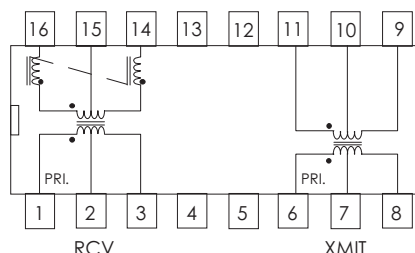
SCHEMATIC DIAGRAM "D"



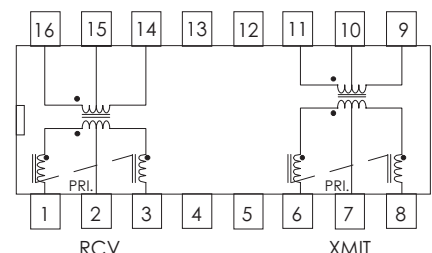
SCHEMATIC DIAGRAM "E"



SCHEMATIC DIAGRAM "F"

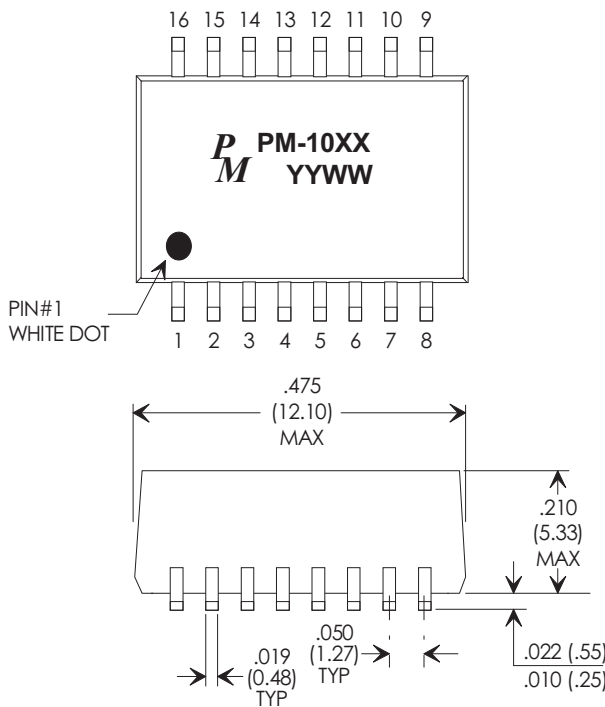


SCHEMATIC DIAGRAM "H"

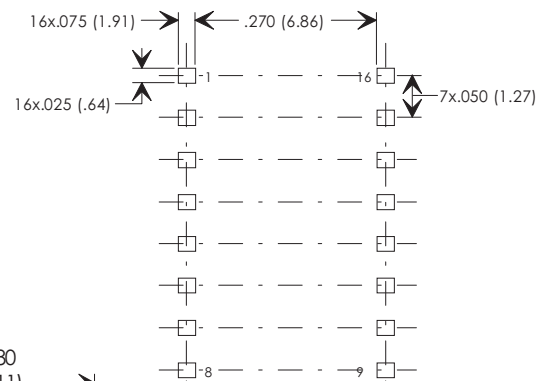


DIMENSIONS & PCB LAYOUT

G1 PACKAGE



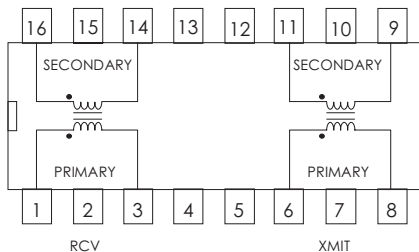
SUGGESTED PCB LAYOUT



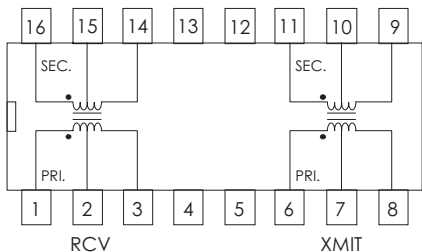
SMALL OUTLINE 10/100BASE-T ISOLATION TRANSFORMERS

SCHEMATICS

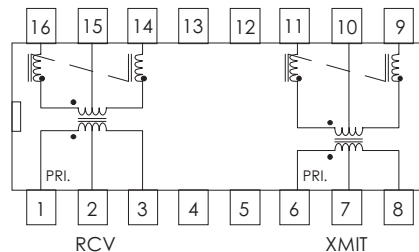
SCHEMATIC DIAGRAM "B"



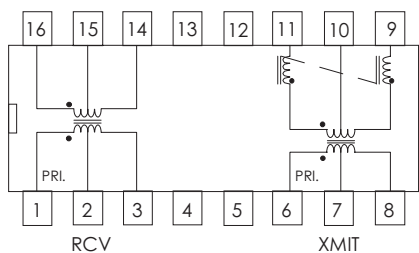
SCHEMATIC DIAGRAM "C"



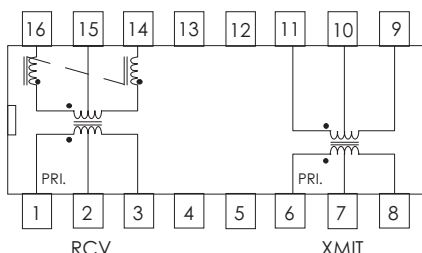
SCHEMATIC DIAGRAM "D"



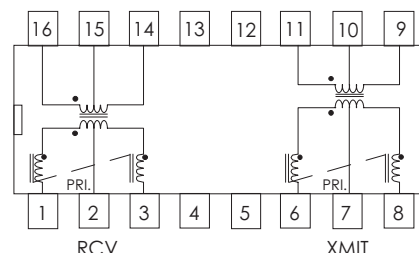
SCHEMATIC DIAGRAM "E"



SCHEMATIC DIAGRAM "F"



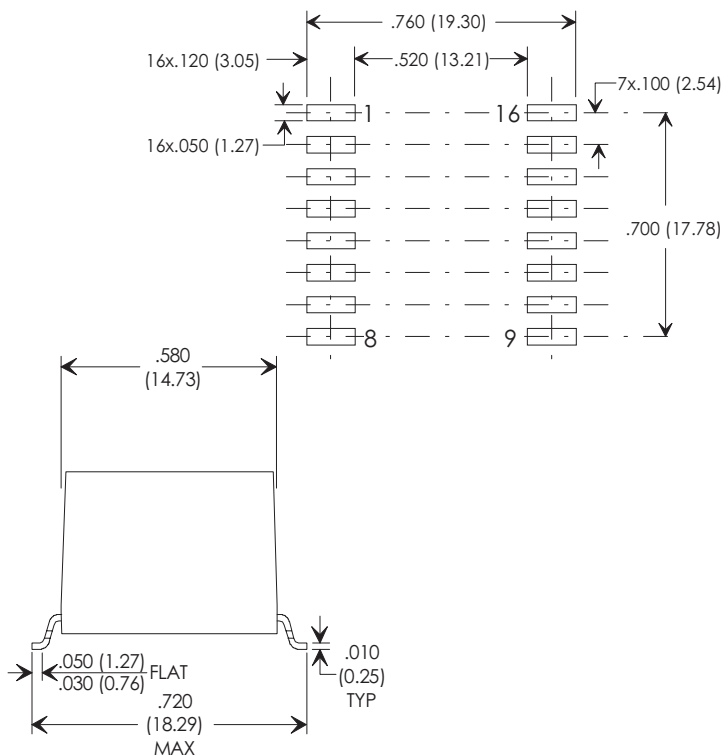
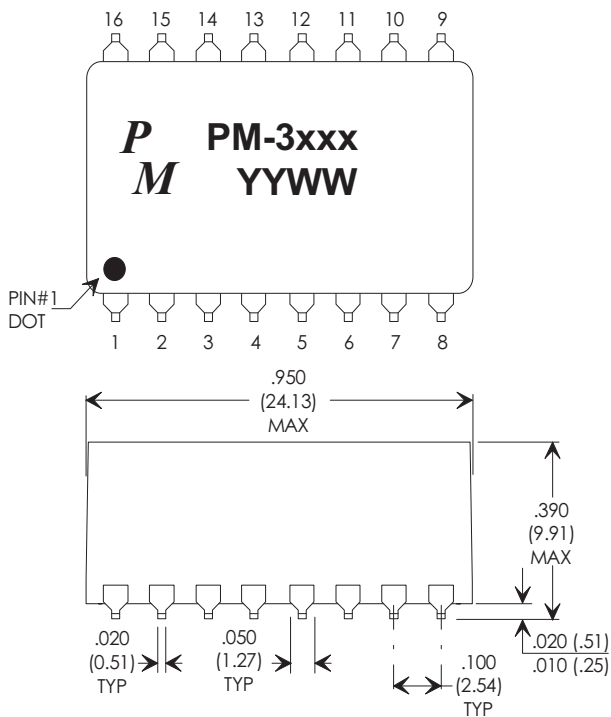
SCHEMATIC DIAGRAM "H"



DIMENSIONS & PCB LAYOUT

H1 PACKAGE

SUGGESTED PCB LAYOUT



Specifications subject to change without notice.

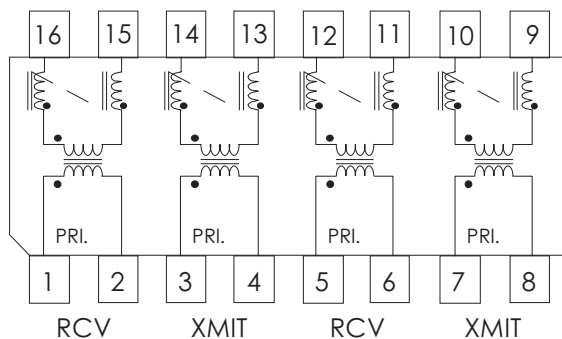
pm-10_30 09/01

SMALL OUTLINE 10/100BASE-T ISOLATION TRANSFORMERS

SCHEMATIC

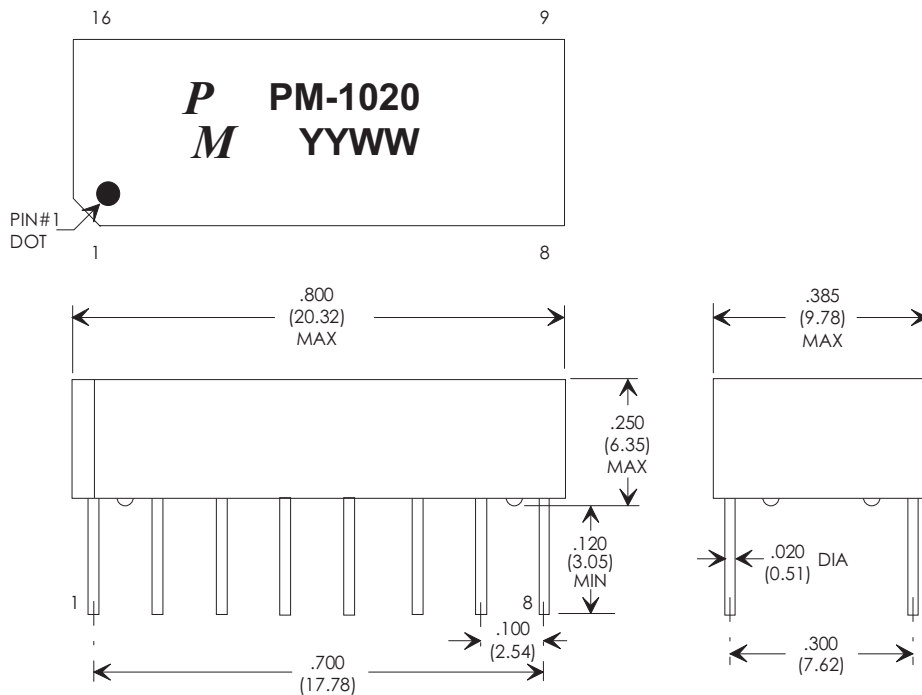
A8 PACKAGE

SCHEMATIC DIAGRAM "G"



DIMENSIONS & PCB LAYOUT

A8 PACKAGE



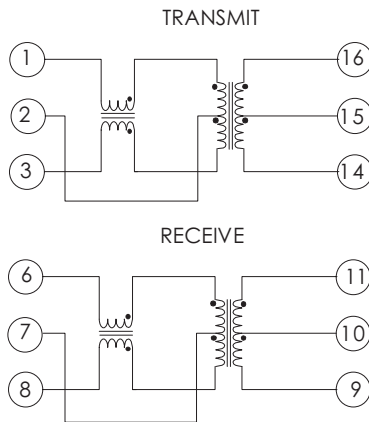
10/100 Base-TX SINGLE PORT MAGNETIC MODULES

- ① Meets All IEEE 802.3 and ANSI X3.263 Standard Including 350 uH OCL With 8 mADC Bias
- ② Compact Footprint for Use in the Most Space Restrictive Applications

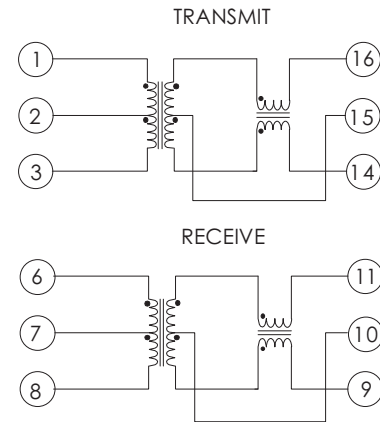
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	Turn Ratio		INSERTION LOSS (dB Max) 100KHz to 100MHz	Return Loss (dB TYP)			Diff. to Com Mode Rejection (dB Min)			Crosstalk (dB Min)			Schematic	HI-POT (Vrms)
	TX	RX		30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz		
PM-6101	1:1	1:1	1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	A	1500
PM-6102	1:1	1:1	1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	B	1500
PM-6103	2:1	1:1	1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	B	1500
PM-6104	1:1	2:1	1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	B	1500
PM-6105	1.41:1	1:1	1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	B	1500
PM-6106	1.25:1	1:1	1.1	-20	-14	-11.5	-42	-37	-33	-45	-40	-35	B	1500
PM-6107	1:1.41	1:1	1.1	-18	-12	-11.5	-42	-37	-30	-45	-40	-35	B	1500

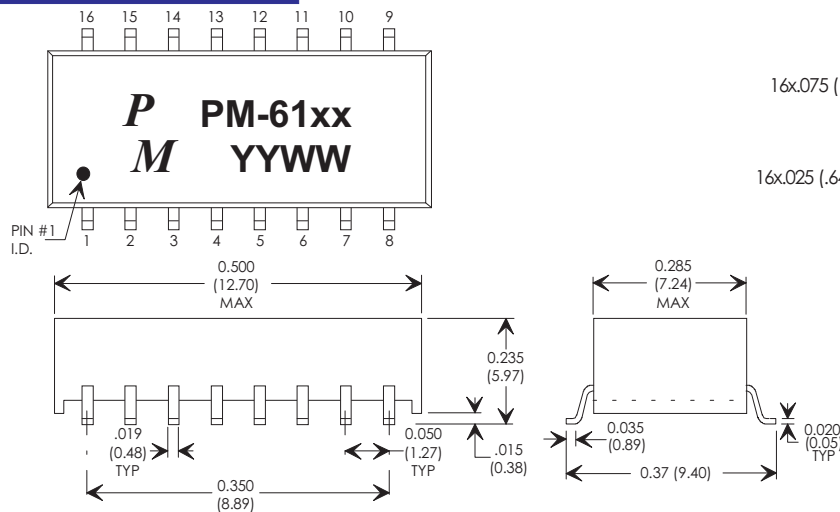
SCHEMATIC "A"



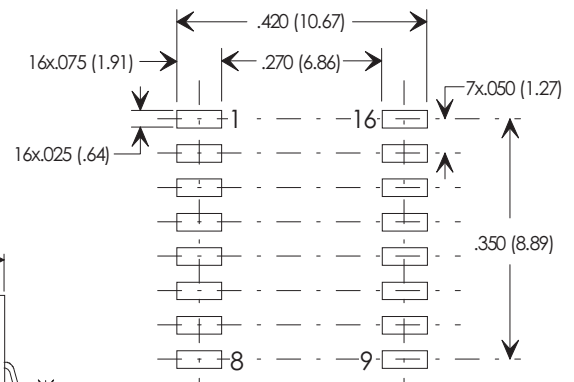
SCHEMATIC "B"



MECHANICAL



PCB LAYOUT



Specifications subject to change without notice.

pm-61xx 11/00

10/100 PC CARD LAN MAGNETICS SOLUTION

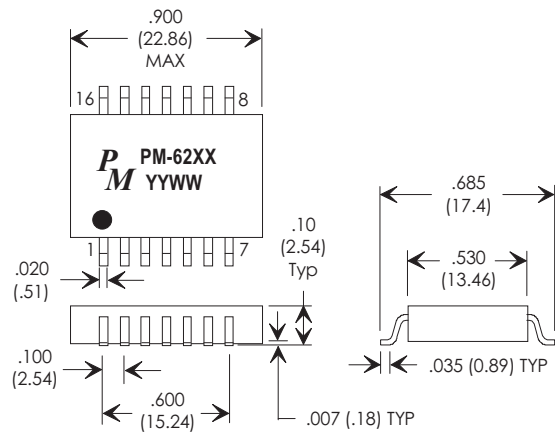
- ① Half Port and Single Port Designs for Maximum Layout Flexibility
- ② Low Profile Package for PC Card and Cardbus Application
- ③ Compatible with TDK, QSI, and ICS Transceivers
- ④ Hi-pot: 1500Vrms

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

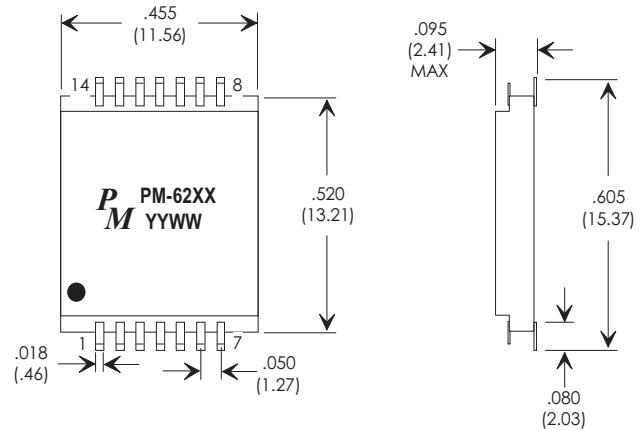
PART NUMBER	Turn Ratio		Ind (uH Min) 100K 8mADC	Insertion Loss (dB Max) 100K to 100MHz	Return Loss (dB Min)			Differential to CMR (dB Min)			Crosstalk (dB Min)			Package/ Schematic
	TX	RX			30 MHz	60 MHz	80 MHz	30 MHz	50 MHz	80 MHz	30 MHz	62 MHz	100 MHz	
PM-6201	1:1:1ct	2ct:1ct	350	-1.0	-20	-17	-10	-38	-38	-10	-38	-38	-35	1 / E
PM-6202	1ct:1ct	1ct:1ct	350	-1.0	-18	-15	-12	-30	-30	-30	-40	-40	-30	3 / F
PM-6203	1.41ct:1ct	1ct:1ct	350	-1.0	-18	-12	-10	-30	-30	-30	-40	-40	-35	1 / G
PM-6204	1.41ct:1ct	1ct:1ct	350	-1.1	-18	-13	-11	-30	-30	-30	-40	-40	-35	2 / F
PM-6205	1.41ct:1ct	1ct:1ct	350	-2.0	-18	-12	-10	-30	-30	-20	-40	-40	-35	1 / A
PM-6206	1.41ct:1ct	1ct:1ct	350	-2.0	-18	-12	-10	-30	-30	-20	-40	-40	-35	2 / A
PM-6207	1ct:1ct	1ct:1ct	350	-1.3	-18	-13	-11	-40	-35	-30	-40	-40	-35	1 / A
PM-6208	1ct:1ct	1ct:1ct	350	-1.3	-18	-13	-11	-40	-35	-30	-40	-40	-35	2 / A
PM-6209	1ct:1ct	1ct:1ct	350	-1.0	-20	-17	-10	-38	-38	-10	-38	-38	-35	1 / B
PM-6211	1ct:1ct		350	-1.1	-17	-12	-10	-30	-30	-30	----	----	----	3 / C
PM-6213	1.25ct:1ct		350	-1.1	-17	-12	-10	-30	-30	-30	----	----	----	3 / C
PM-6215	1ct:1ct	1ct:1ct	350	-1.3	-16	-12	-11	-15	-18	-20	-40	-40	-35	4 / D
PM-6217	1.25ct:1ct	1ct:1ct	350	-1.1	-17	-12	-10	-30	-30	-20	-40	-35	-30	4 / D
PM-6218	1.25ct:1ct	1ct:1ct	350	-1.1	-17	-12	-10	-30	-30	-20	-40	-35	-30	2 / B
PM-6219	1ct:1ct	1ct:1ct	350	-1.0	-18	-12	-11	-30	-30	-20	-40	-40	-35	4 / D
PM-6220	1ct:1ct	1ct:1ct	350	-1.0	-18	-12	-11	-30	-30	-20	-40	-40	-35	2 / B
PM-6221	1ct:1ct	1ct:1ct	350	-1.0	-18	-12	-10	-45	-35	-10	-35	-35	-35	1 / H
PM-6222	1ct:1ct	1ct:1ct	350	-1.5	-18	-11	-10	-40	-40	-40	-40	-35	-35	5 / I
PM-6223	1ct:1ct	1ct:1ct	350	-1.0	-18	-13	-11	-45	-35	-30	-40	-40	-35	1 / J
PM-6225	1ct:1ct	1ct:1ct	350	-1.0	-18	-13	-11	-45	-35	-30	-40	-40	-35	1 / K
PM-6227	1ct:1ct	1ct:1ct	350	-1.0	-18	-13	-11	-45	-35	-30	-40	-40	-35	1 / L
PM-6260	1.41ct:1ct	1ct:1ct	350	-1.0	-17	-12	-10	-30	-30	-20	-40	-35	-30	4 / D
PM-6262	1ct:1.41ct	1ct:1ct	350	-1.1	-18	-13	-11	-30	-30	-30	-40	-40	-30	4 / M
PM-6264	1ct:1ct	1ct:1ct	350	-1.0	-18	-12	-11	-30	-30	-30	-40	-40	-35	4 / D
PM-6266	1ct:1ct	1ct:1ct	350	-1.0	-18	-12	-11	-30	-30	-30	-40	-40	-35	4 / T
PM-6278	1ct:1ct	1ct:1ct	200	-0.9	-16	-12	-11	-40	-40	-40	-38	-38	-38	3 / N
PM-6281	1ct:1ct	1ct:1ct	170	-0.9	-16	-12	-11	-40	-40	-40	-38	-38	-38	3 / P
PM-6283	1ct:1ct	1ct:1ct	170	-0.9	-16	-12	-11	-40	-40	-40	-38	-38	-38	3 / R
PM-6284	1ct:1ct	1ct:1ct	350	-1.1	-18	-16	-10	-30	-30	-30	-38	-38	-38	3 / D
PM-6290	1ct:1ct	1ct:1ct	150	-2.0	-18	-14	-12	-30	-30	-30	-50	-45	-40	6 / S

10/100 PC CARD LAN MAGNETICS SOLUTION

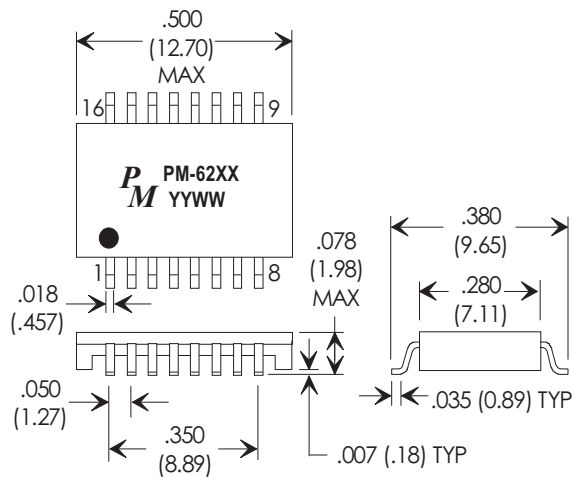
PACKAGE "1"



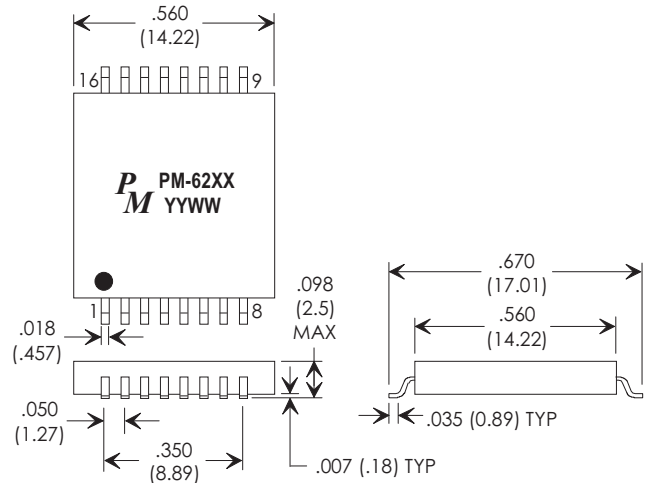
PACKAGE "2"



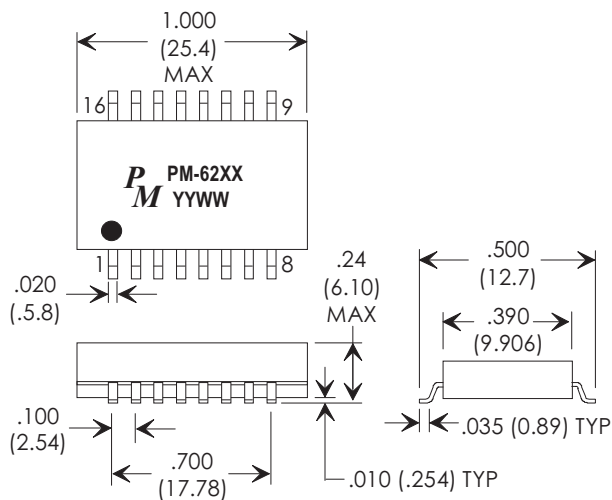
PACKAGE "3"



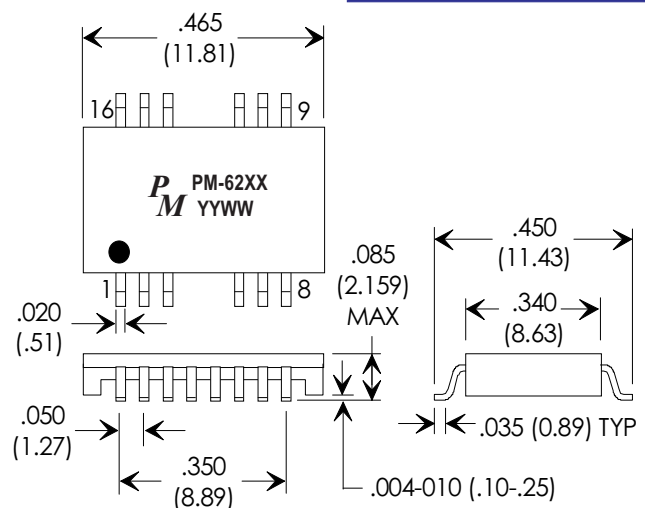
PACKAGE "4"



PACKAGE "5"



PACKAGE "6"



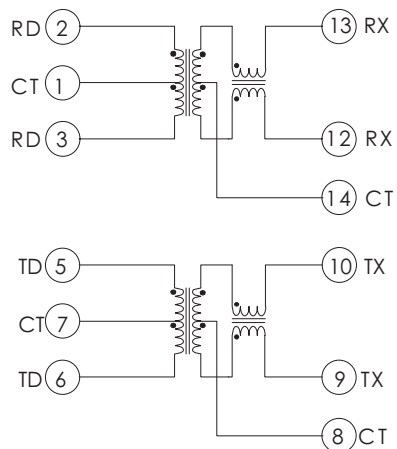
Specifications subject to change without notice.

pm-6xxx 11/00

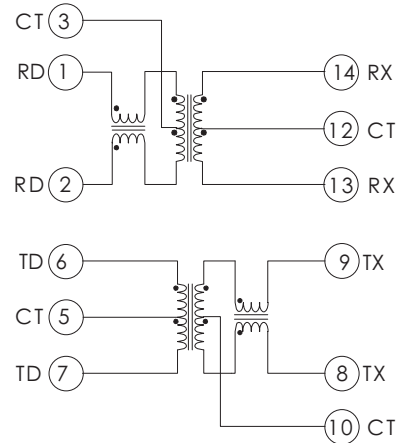
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10/100 PC CARD LAN MAGNETICS SOLUTION

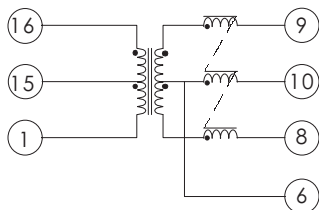
SCHEMATIC "A"



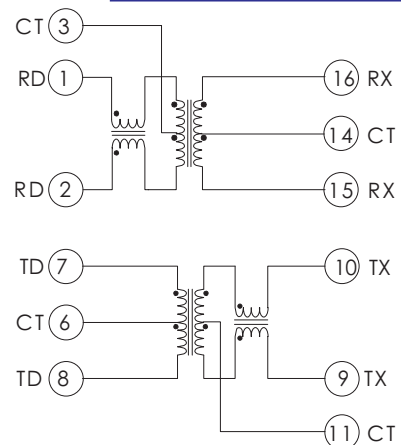
SCHEMATIC "B"



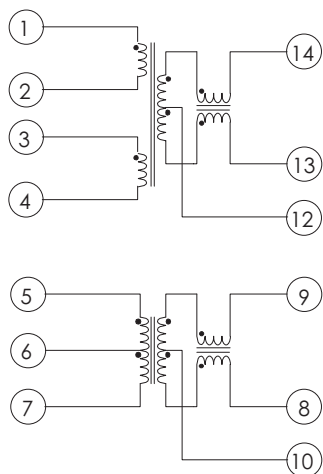
SCHEMATIC "C"



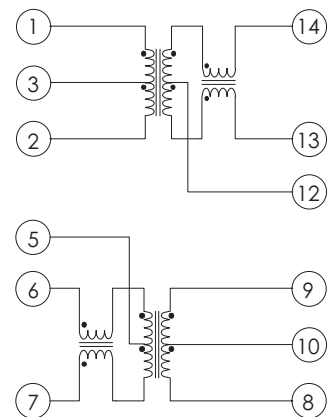
SCHEMATIC "D"



SCHEMATIC "E"

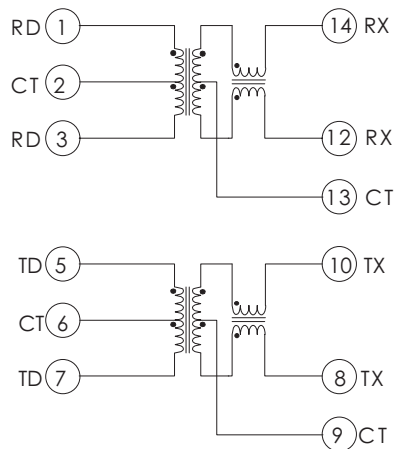


SCHEMATIC "F"

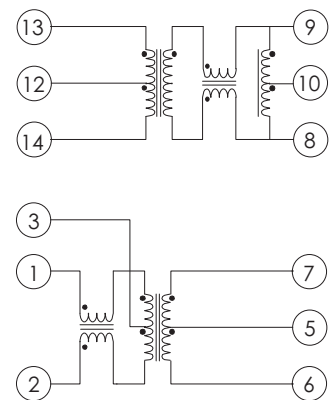


10/100 PC CARD LAN MAGNETICS SOLUTION

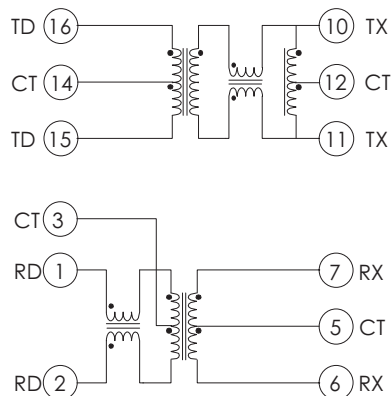
SCHEMATIC "G"



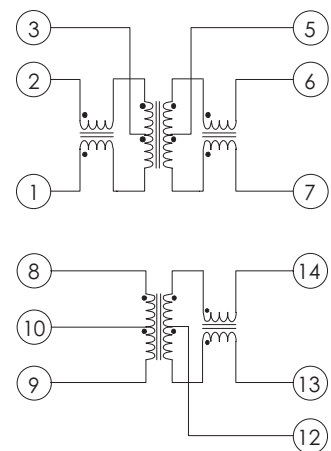
SCHEMATIC "H"



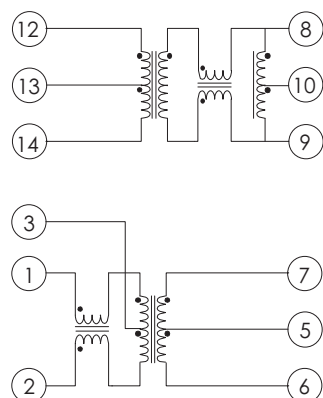
SCHEMATIC "I"



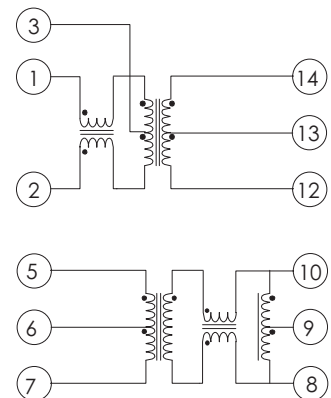
SCHEMATIC "J"



SCHEMATIC "K"

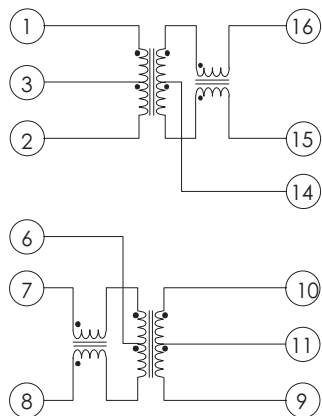


SCHEMATIC "L"

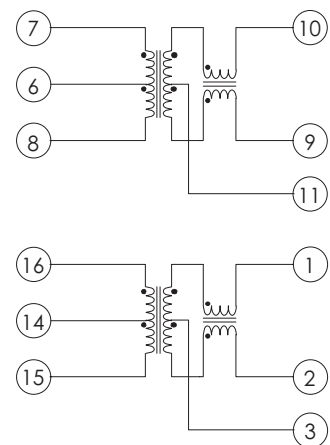


10/100 PC CARD LAN MAGNETICS SOLUTION

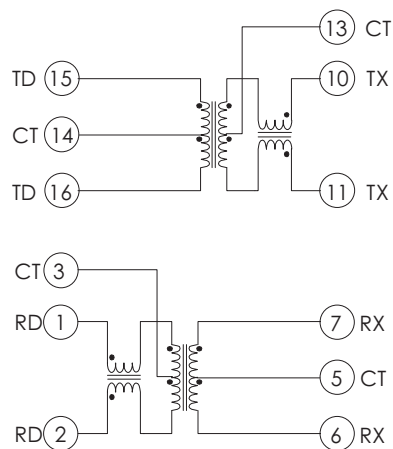
SCHEMATIC "M"



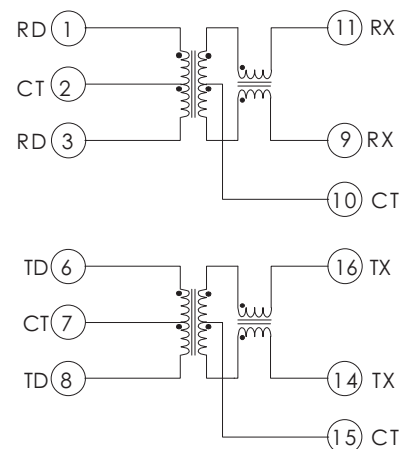
SCHEMATIC "N"



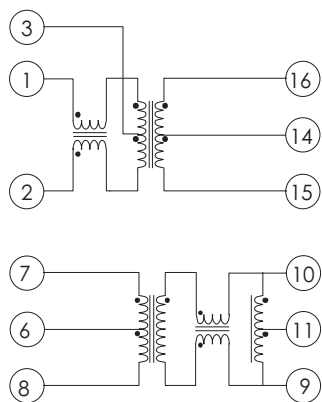
SCHEMATIC "P"



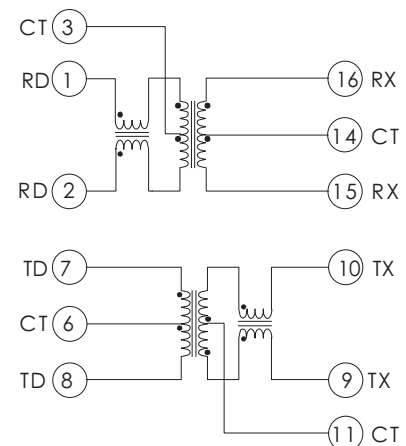
SCHEMATIC "R"



SCHEMATIC "S"



SCHEMATIC "T"





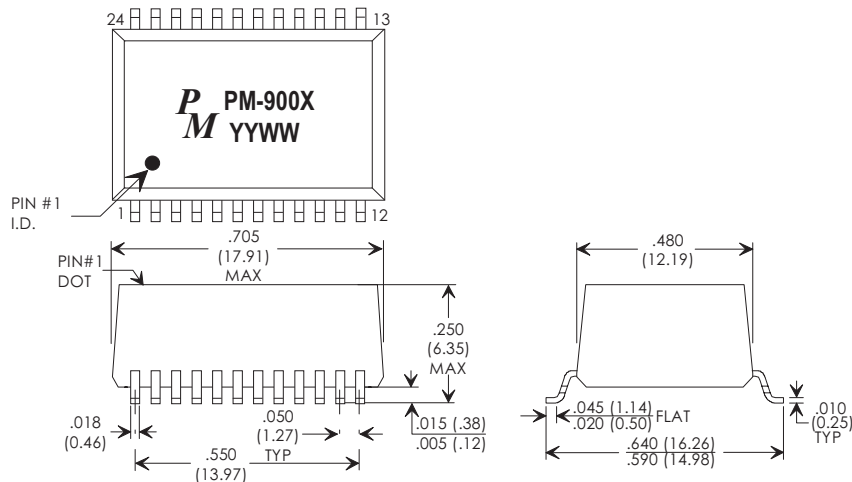
1000 Base-T MODULES ISOLATION TRANSFORMERS WITH FILTERS

- ① Designed for Long Haul Gigabit Ethernet 100/1000 Base-T
- ② Provides the Cable Interface, Isolation & Common Mode Filtering
- ③ Meet IEEE 802.3ab Standard for 1000 Base-T
- ④ Supports 4 Pairs of Category 5 UTP Cable

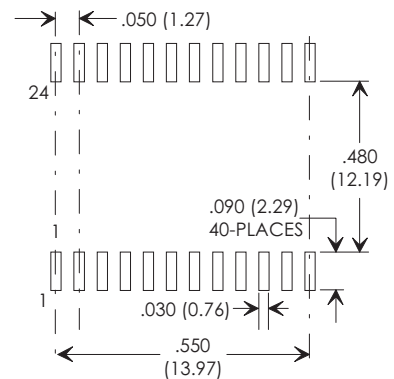
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	INSERTION LOSS (dB Max) 1 to 100MHz	Return Loss (dB Typ)					Differential to Common Mode Rejection (dB Min)			Crosstalk (dB Min)			HI-POT (Vrms Min)
		1-30 MHz	40 MHz	50 MHz	60-80 MHz	100 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
PM-9001	-1.0	-18	-14.4	-13.1	-12	-10	-43	-37	-33	-45	-40	-35	1500
PM-9002	-1.0	-18	-14.4	-13.1	-12	-10	-43	-37	-33	-45	-40	-35	1500

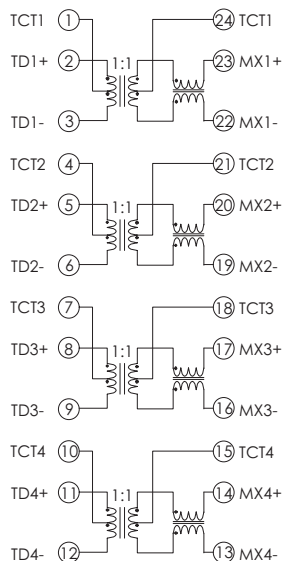
PM-900X MECHANICAL



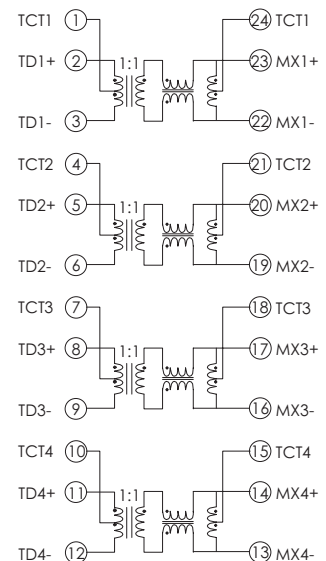
PCB LAYOUT



PM-9001 SCHEMATIC



PM-9002 SCHEMATIC



Specifications subject to change without notice.

pm-9xxx 02/02

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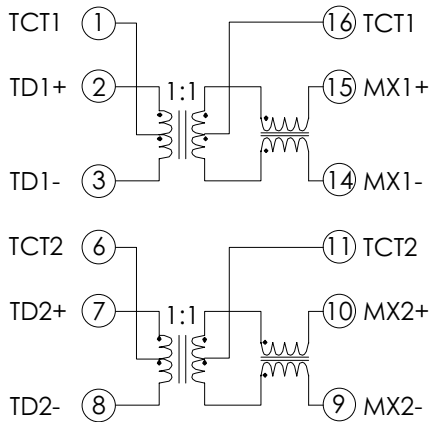
1000 Base-T MODULES ISOLATION TRANSFORMERS WITH FILTERS

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- ② Provides the Cable Interface, Isolation & Common Mode Filtering
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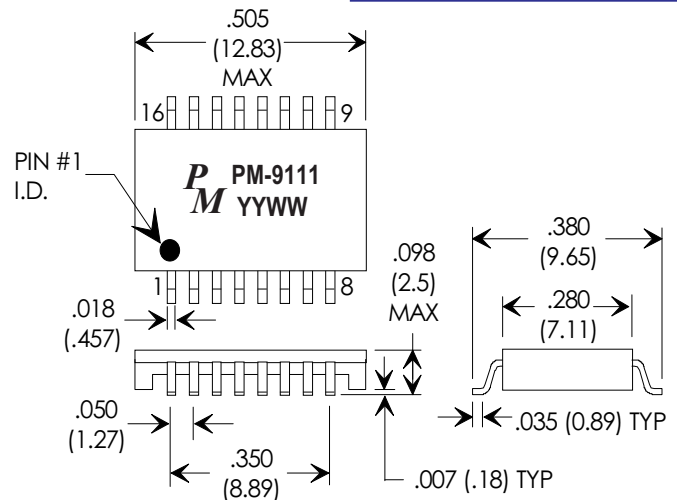
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	INSERTION LOSS (dB Max) 1 to 100MHz	Return Loss (dB Typ)					Differential to Common Mode Rejection (dB Min)			Crosstalk (dB Min)			HI-POT (Vrms Min)
		1-30 MHz	40 MHz	50 MHz	60-80 MHz	100 MHz	30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	100 MHz	
PM-9111	-1.0	-18	-14.4	-13.1	-12	-10	-43	-37	-33	-45	-40	-35	1500
PM-9112	-1.0	-18	-14.4	-13.1	-12	-10	-43	-37	-33	-45	-40	-35	1500

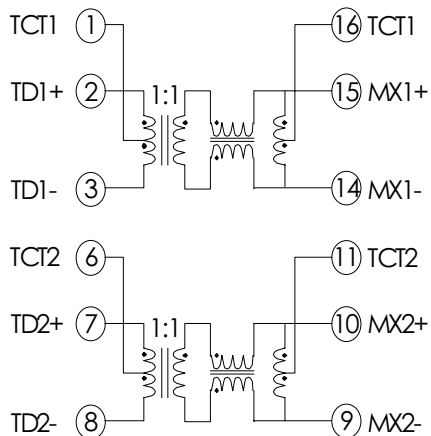
PM-9111 SCHEMATIC



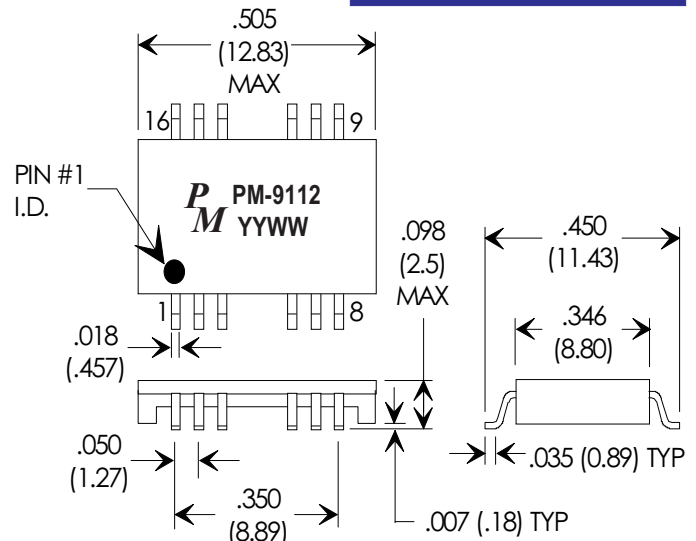
PM-9111 MECHANICAL



PM-9112 SCHEMATIC



PM-9112 MECHANICAL



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pm-9xxx 02/02

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GENERAL PURPOSE COUPLING TRANSFORMERS

- ❶ Wide Selection of Standard Types
- ❷ Industry Standard Package
- ❸ Low Leakage Ind. and Winding Capacitance
- ❹ Average Power Rating 500 mW (40°C Rise)
- ❺ Dissipation Rating 150 mW
- ❻ Fast Rise Times
- ❼ 2000Vrms Minimum Isolation Voltage
- ❽ Insulation Resistance 10,000M Ω Minimum
- ❾ Peak Pulse Voltage 100V
- ❿ Custom Designs Available

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	URNS RATIO ($\pm 5\%$)	PRIMARY OCL ($\mu\text{H MIN}$)	PRIMARY ET CONSTANT (V- $\mu\text{sec Min.}$)	RISE TIME (ns Max.)	PRI-SEC Cw/w (pf Max.)	PRI / SEC L_L ($\mu\text{H Max.}$)	PRI DCR (Ω Max.)	SEC DCR (Ω Max.)	TER DCR (Ω Max.)	Sch.
PM-NW01	1:1:1	5,000	25.0	11.0	60.0	1.3	3.9	3.9	3.9	A
PM-NW02	1:1:1	2,000	16.0	8.5	37.0	.80	2.5	2.5	2.5	A
PM-NW03	1:1:1	1,000	11.0	8.0	30.0	.70	2.0	2.0	2.0	A
PM-NW04	1:1:1	500	8.5	5.5	32.0	.60	1.5	1.5	1.5	A
PM-NW05	1:1:1	200	6.5	4.5	18.0	.50	1.0	1.0	1.0	A
PM-NW06	1:1:1	100	6.0	5.5	15.0	.40	0.8	0.8	0.8	A
PM-NW07	1:1:1	50	5.5	5.0	10.0	.30	0.7	0.7	0.7	A
PM-NW08	1:1:1	20	4.0	4.4	9.0	.30	0.6	0.6	0.6	A
PM-NW09	1:1:1	10	3.5	4.2	8.0	.30	0.5	0.5	0.5	A
PM-NW10	2:1:1	5,000	25.0	11.0	35.0	4.0	3.9	2.0	2.0	A
PM-NW11	2:1:1	2,000	16.0	8.5	20.0	2.0	2.5	1.5	1.5	A
PM-NW12	2:1:1	500	8.5	5.5	12.0	1.5	1.5	0.8	0.8	A
PM-NW13	2:1:1	200	6.5	4.5	9.0	1.0	1.0	0.6	0.6	A
PM-NW14	2:1:1	20	4.0	4.4	8.0	0.8	0.6	0.5	0.5	A
PM-NW15	1ct:1ct	2,000	16.0	8.5	37.0	.80	2.5	2.5	----	G
PM-NW16	1ct:1ct	1,000	11.0	8.0	30.0	.70	2.0	2.0	----	G
PM-NW17	1ct:1ct	500	8.5	5.5	32.0	.60	1.5	1.5	----	G
PM-NW18	1ct:1ct	200	6.5	4.5	18.0	.50	1.0	1.0	----	G
PM-NW19	1ct:1ct	100	6.0	5.5	15.0	.40	0.8	0.8	----	G
PM-NW20	1ct:1ct	50	5.5	5.0	10.0	.30	0.7	0.7	----	G
PM-NW21	2ct:1	5,000	25.0	11.0	35.0	4.0	3.9	2.0	2.0	A
PM-NW22	2ct:1	2,000	16.0	8.5	20.0	2.0	2.5	1.5	1.5	A
PM-NW23	2ct:1	500	8.5	5.5	12.0	1.5	1.5	0.8	0.8	A
PM-NW24	2ct:1	200	6.5	4.5	9.0	1.0	1.0	0.6	0.6	A
PM-NW25	2ct:1	20	4.0	4.4	8.0	0.8	0.6	0.5	0.5	A
PM-NW26	1.25:1	1,200	11.0	10.0	35.0	0.8	0.8	0.7	----	B

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pnmw 10/97

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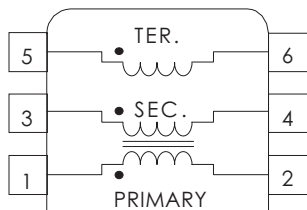
GENERAL PURPOSE COUPLING TRANSFORMERS

"T6" SCHEMATICS

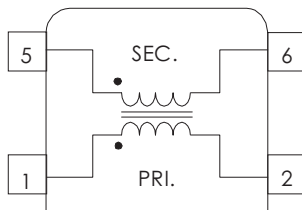
SINGLE CORE

SCHEMATIC DIAGRAMS

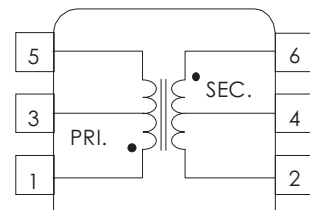
SCHEMATIC "A"



SCHEMATIC "B"



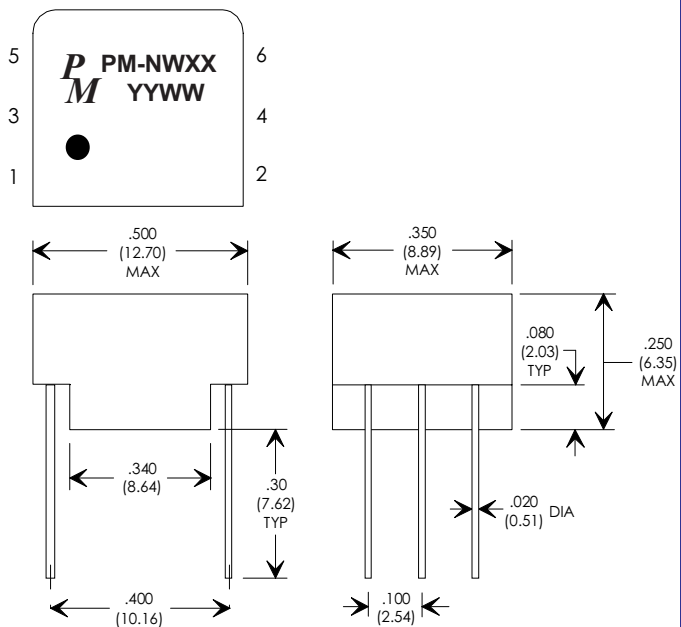
SCHEMATIC "G"



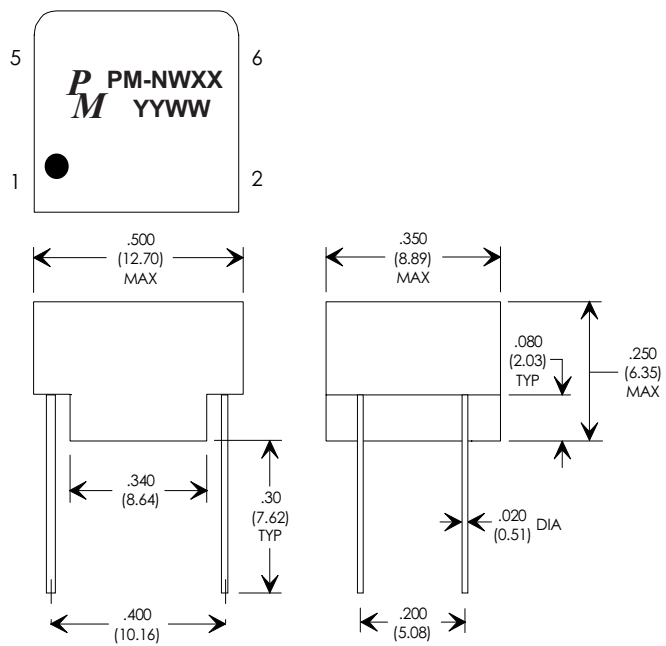
"T6" MECHANICALS

SINGLE CORE

Schematic "A" & "G"



Schematic "B"
Pin #3 & 6 Removed



SIGNAL LINE FILTERS COMMON MODE CHOKES

- ① Ideal for LAN & Telecom Applications
- ② Filters Common Mode Noise
- ③ Provides EMI Suppression

- ④ Frequency Ranges 100KHz to 500 MHz
- ⑤ 500Vrms Isolation Minimum
- ⑥ Thru-Hole & SMD Packages

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

THRU-HOLE CHOKES

PART NUMBER	TURNS RATIO (± 5%)	# of CORES x # of LINES	PRIMARY INDUCTANCE (OCL μ H min)	LEAKAGE INDUCTANCE (μ H max.)	PRI-SEC Cw/w (pf max.)	PRIMARY DCR (OHMS max.)	PACKAGE & SCHEMATIC
PM-SF01	1:1:1:1	1x4	4.0	.20	6.0	.17	1-A
PM-SF02	1:1:1:1	1x4	8.0	.20	10.0	.25	1-A
PM-SF03	1:1:1:1	1x4	24.0	.20	15.0	.30	1-A
PM-SF04	1:1:1:1:1	1x6	4.0	.20	6.0	.18	2-A
PM-SF05	1:1:1:1:1	1x6	24.0	.20	15.0	.35	2-A
PM-SF06	1:1:1:1	2x4	4.0	.20	6.0	.17	3-C
PM-SF07	1:1:1:1	2x4	8.0	.20	10.0	.25	3-C
PM-SF08	1:1:1:1	2x4	24.0	.20	15.0	.30	3-C
PM-SF09	1:1:1:1	1x4	36.0	.30	25.0	.35	1-A
PM-FS10	1:1	1x2	6.3	4.0	180.0	.65	7-A

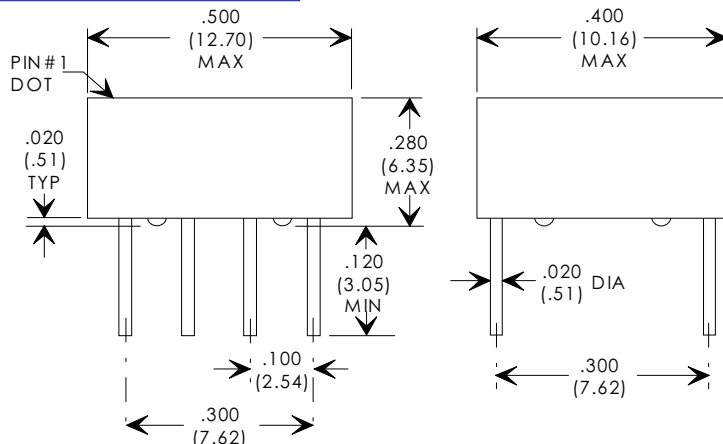
SURFACE MOUNT CHOKES

PART NUMBER	TURNS RATIO(S) (± 5%)	# of CORES x # of LINES	PRIMARY INDUCTANCE (OCL μ H min)	LEAKAGE INDUCTANCE (μ H max.)	PRI-SEC Cw/w (pf max.)	PRIMARY DCR (OHMS max.)	SCHEMATIC & PACKAGE
PM-SF30	1:1 x 2	2x2	37.0	.20	15.0	.30	5-A
PM-SF31	1:1 x 3	3x2	21.0	.20	15.0	.35	5-B
PM-SF32	1:1 x 4	4x2	36.0	.20	15.0	.35	5-C
PM-SF33	1:1:1:1	1x4	36.0	.30	25.0	.25	5-D
PM-SF34	1:1:1:1	1x4	24.0	.20	15.0	.30	4-A
PM-SF35	1:1 x 2	2x2	100	.30	35.0	.60	4-B

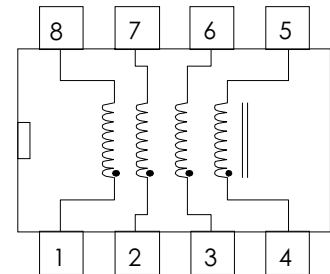
SELF LEAD SURFACE MOUNT CHOKES

PART NUMBER	TURNS RATIO(S) (± 5%)	# of CORES x # of LINES	PRIMARY INDUCTANCE (OCL μ H min)	LEAKAGE INDUCTANCE (μ H max.)	PRI-SEC Cw/w (pf max.)	PRIMARY DCR (OHMS max.)	SCHEMATIC & PACKAGE
PM-SF50	1:1	1	877	N/A	N/A	.200	6-A
PM-SF51	1:1	1	663	N/A	N/A	.110	6-A

PACKAGE "1"



SCHEMATIC "A"

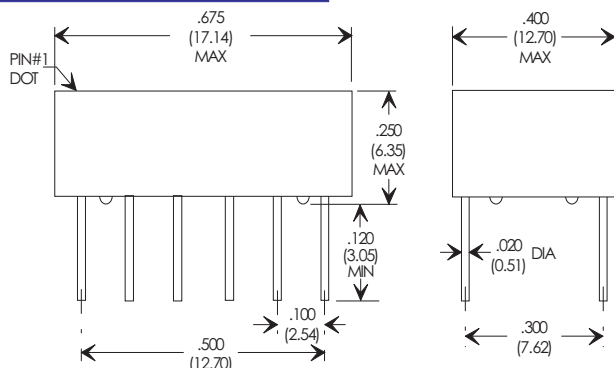


Specifications subject to change without notice.

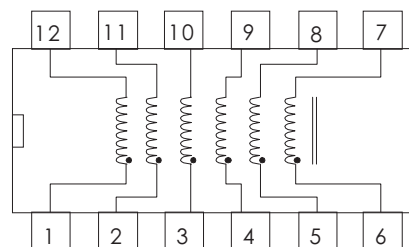
pm-sfxx 09/00

SIGNAL LINE FILTERS COMMON MODE CHOKES

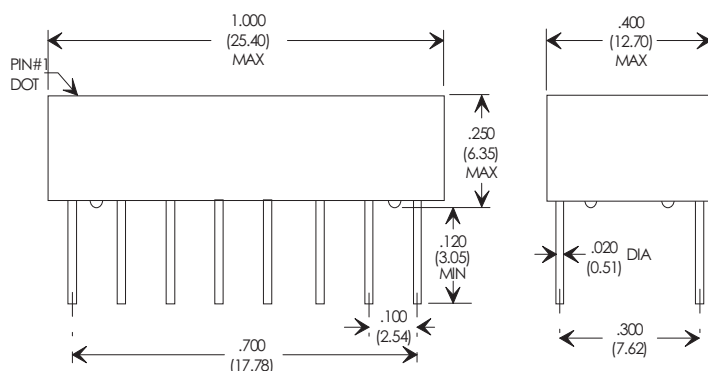
PACKAGE "2"



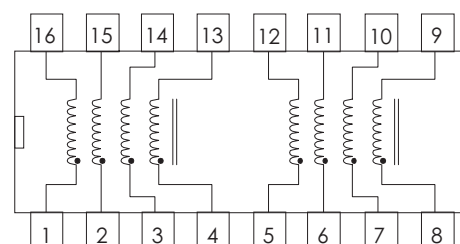
SCHEMATIC "A"



PACKAGE "3"

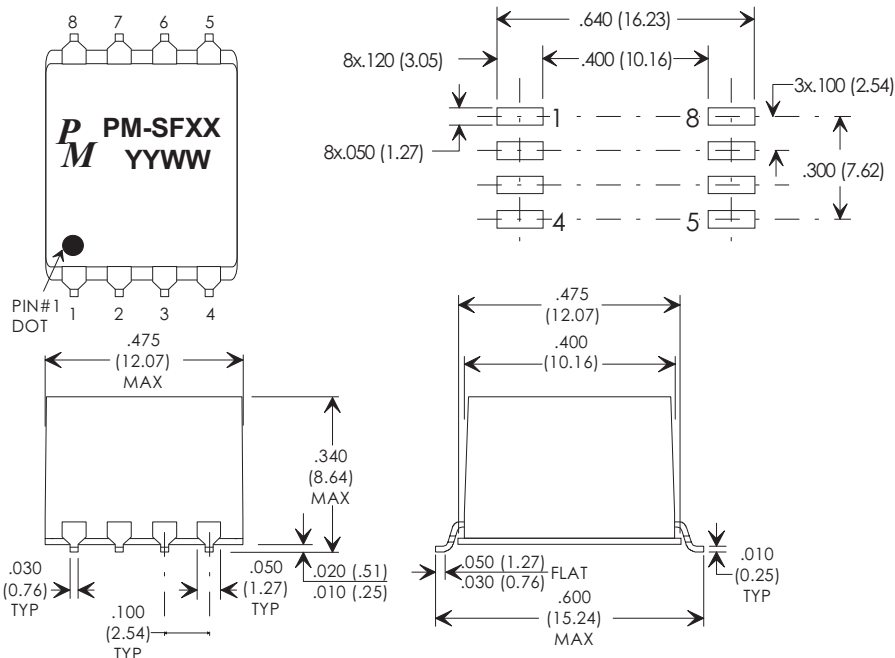


SCHEMATIC "A"

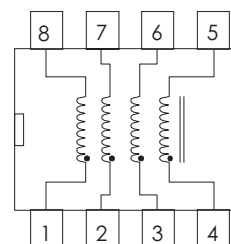


PACKAGE "4"

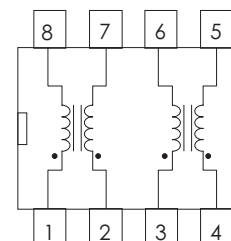
RECOMMENDED PCB LAYOUT



SCHEMATIC "A"

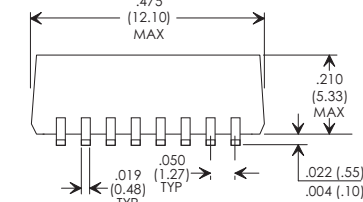
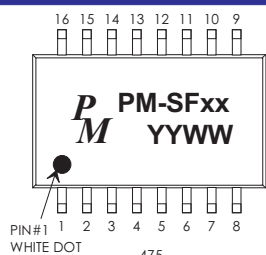


SCHEMATIC "B"

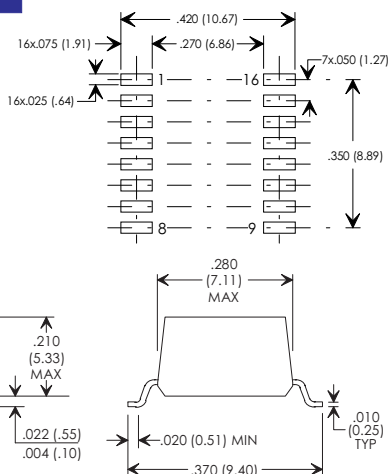


SIGNAL LINE FILTERS COMMON MODE CHOKES

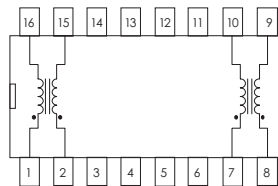
PACKAGE "5"



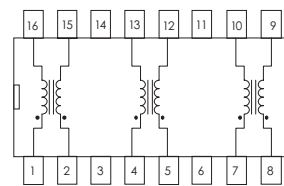
RECOMMENDED PCB LAYOUT



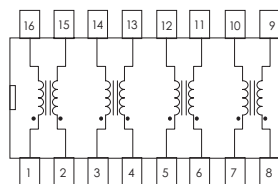
SCHEMATIC "A"



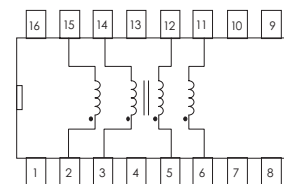
SCHEMATIC "B"



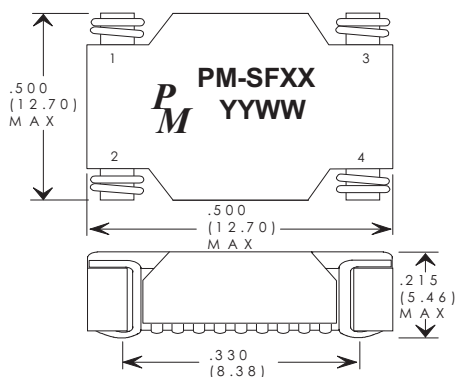
SCHEMATIC "C"



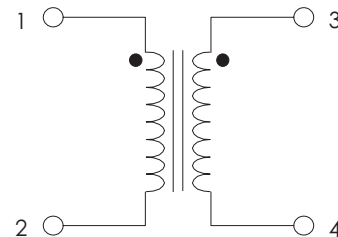
SCHEMATIC "D"



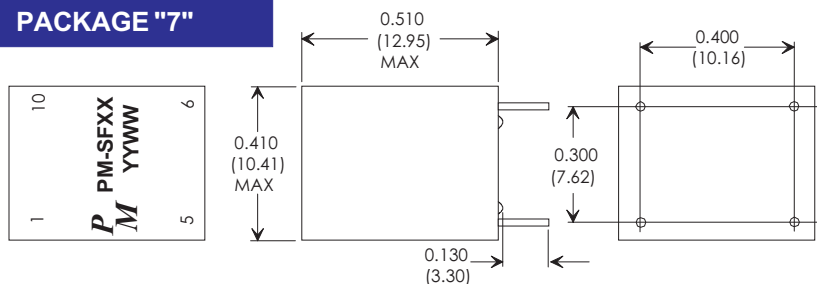
PACKAGE "6"



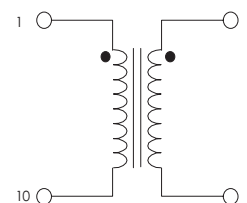
SCHEMATIC "A"



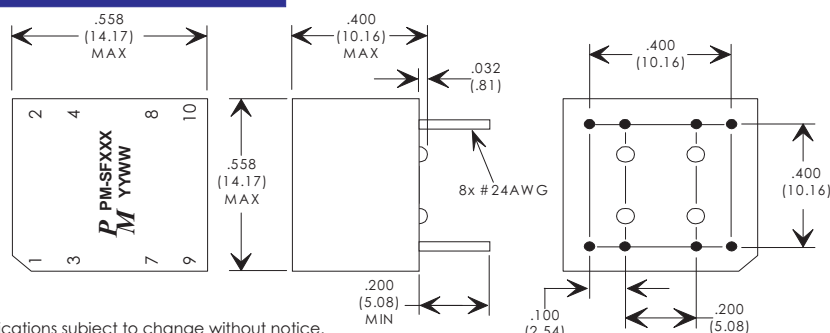
PACKAGE "7"



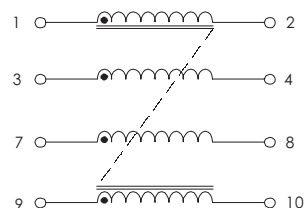
SCHEMATIC "A"



PACKAGE "8"



SCHEMATIC "E"



Specifications subject to change without notice.

pmsfxx 09/00



SIGNAL LINE FILTERS COMMON MODE CHOKES

- ① Ideal for LAN & Telecom Applications
- ② Filters Common Mode Noise
- ③ Reduces Radiated EMI Emissions

- ④ Common Mode Attenuation from
100 KHz to 1 GHz

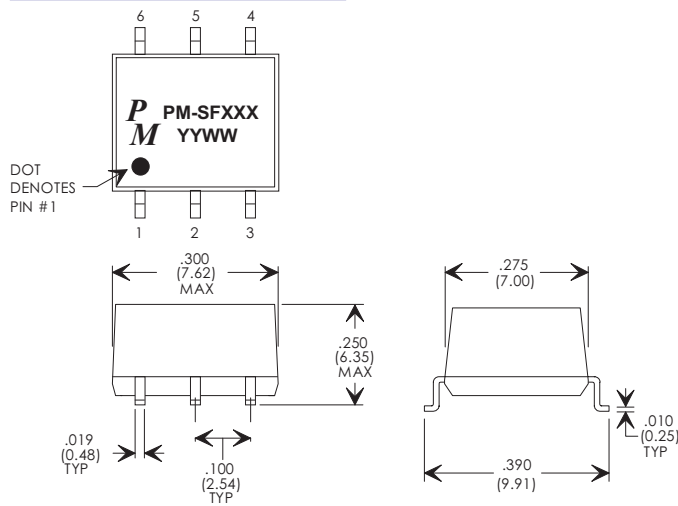
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

SURFACE MOUNT CHOKES

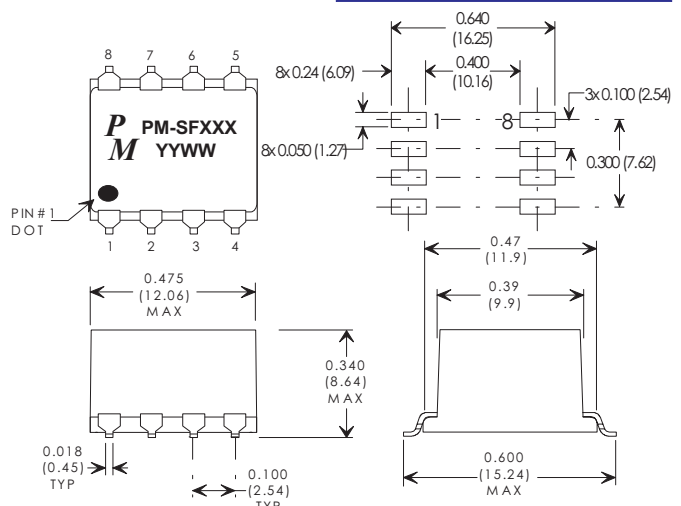
PART NUMBER	No. of Lines	PRIMARY INDUCTANCE (OCL μ H min)	Common Mode Attenuation in Hz (dB TYP)									DCR (Ω max.)	PACKAGE & SCHEMATIC
			100K	1M	10M	30M	50M	100M	300M	500M	1G		
PM-SF100	2	40	7	23	35	39	37	32	21	16	--	0.20	A & 1
PM-SF101	3	85	9	24	31	30	29	27	21	16	--	0.20	A & 2
PM-SF102	4	22.5	7	20	30	37	38	34	24	13	--	0.22	B & 3
PM-SF103	4	36	7	23	35	38	38	26	29	24	--	0.50	B & 3
PM-SF104	4	37	8	21	28	28	28	27	25	22	--	0.30	C & 4
PM-SF105	4	85	8	22	28	28	27	25	20	15	--	0.20	B & 3
PM-SF106	4	100	14	33	44	48	49	44	34	29	20	0.60	B & 5
PM-SF107	4	4700 $\pm$ 30%	40	51	38	30	25	20	14	13	--	1.20	D & 6
PM-SF108	6	21	6	19	28	34	35	36	34	29	1	0.35	C & 7
PM-SF109	6	85	8	22	29	30	30	29	24	19	--	0.20	C & 7
PM-SF110	8	36	8	24	36	39	35	29	18	11	--	0.35	C & 8
PM-SF111	8	85	8	24	30	29	27	24	16	11	--	0.20	C & 9
PM-SF112	2	47	11	27	40	44	42	36	26	17	--	0.40	E & 1
PM-SF113	4	47	3	19	32	36	35	29	12	6	--	0.38	F & 3

SIGNAL LINE FILTERS COMMON MODE CHOKES

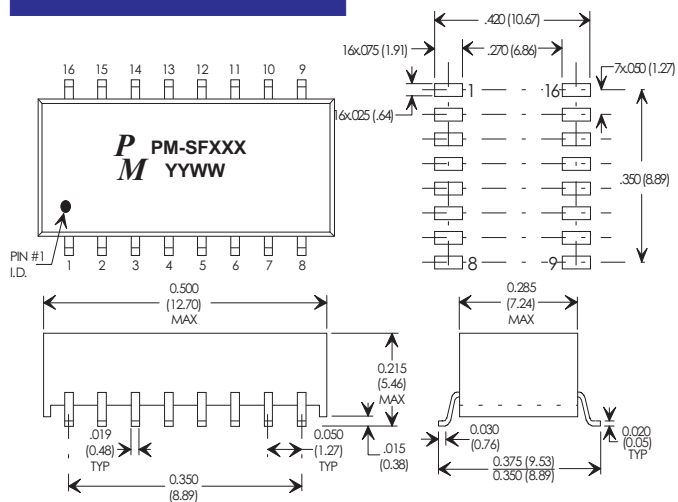
PACKAGE "A"



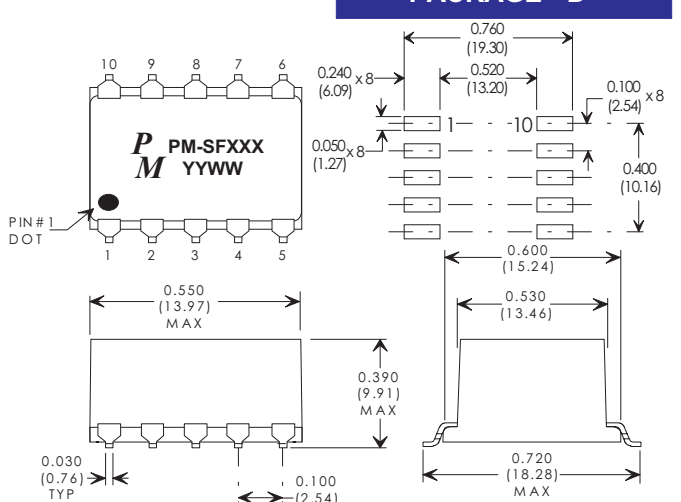
PACKAGE "B"



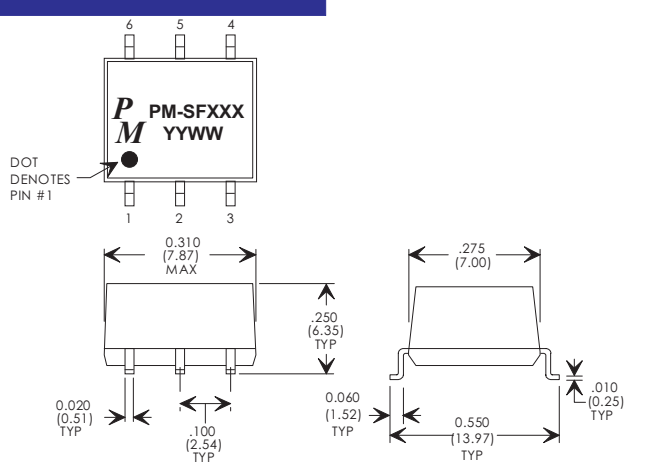
PACKAGE "C"



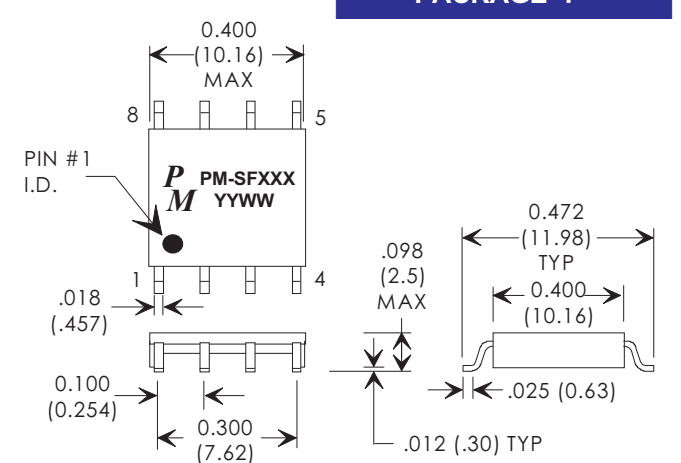
PACKAGE "D"



PACKAGE "E"



PACKAGE "F"



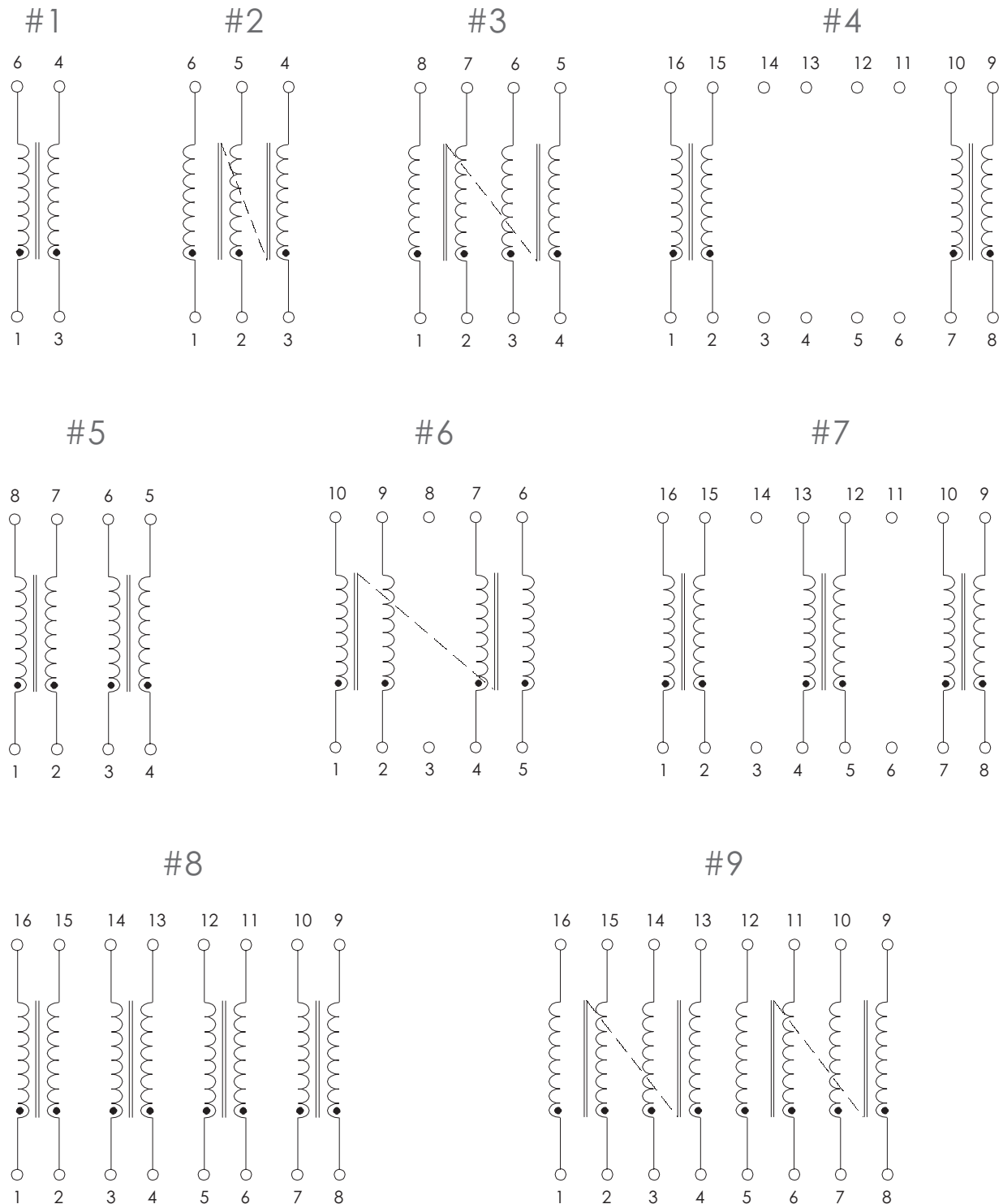
Specifications subject to change without notice.

pm-sfxxx 10/02

SIGNAL LINE FILTERS

COMMON MODE CHOKES

SCHEMATIC



FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

FEATURES:

- ① Designed to Meet FCC Part 68
- ② Designed for V.29, V.32, V.32 Bis & V.Fast Apps.
- ③ Low Profile Thru-Hole Packages
- ④ 1250, 1500 & 3000Vrms Isolation Voltages Available

GENERAL SPECIFICATIONS:

Turns Ratio (Pri:Sec) 1:1 $\pm$ 2%
 Longitudinal Balance:
 60 to 1000 Hz 60 dB Min.
 1000 to 4000 Hz 40 dB Min.
 MC26/27 200 to 4000Hz 60 dB Typ.

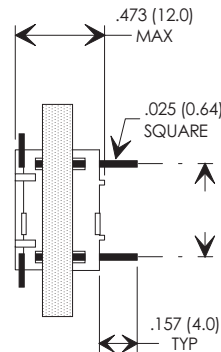
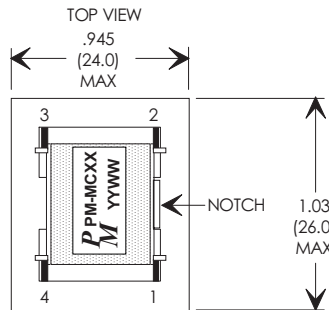
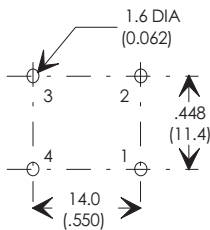
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

PART NUMBER	Package/ Schematic	Primary DC Current (mA Max)	DCR ($\Omega \pm 10\%$)		Pri = 600 Ω with Load of (Ω)	Ins. Loss @ 1KHz (dB Max.)	Harm Dist @ 300Hz (% Typ.)	Ret Loss @ 1800Hz (dB Min.)	Frequency Response ($\pm$ dB)		HI-POT Vrms
			Pri	Sec					300-600Hz	600-3500	
PM-MC01	1 / A	100	108	120	470	2.5	0.5	13.0	2.5	1.0	1500
PM-MC04	1 / A	100	108	120	470	2.5	0.5	13.0	2.5	1.0	3000
PM-MC02	1 / A	0	108	120	374	2.5	0.5	25.0	0.25	0.25	1500
PM-MC03	1 / A	0	150	150	301	3.0	0.5	25.0	0.25	0.25	1500
PM-MC05 ⁽¹⁾	1 / A	0	164	168	301	3.2	0.5	20.0	0.25	0.25	1875
PM-MC21	2 / B	0	67	85	487	1.50	0.5	15.0	0.50	0.50	1500
PM-MC26 ⁽²⁾	3 / C	0	68	85	475	1.25	0.5	26.0	0.25	0.25	1250
PM-MC27 ⁽²⁾	4 / D	0	68	85	475	1.25	0.5	26.0	0.25	0.25	1250

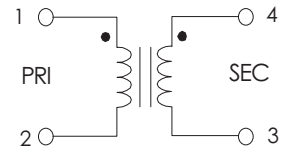
NOTE: (1) DESIGNED TO MEET SUPPLEMENTARY INSULATION REQUIREMENTS FOR A PRIMARY CIRCUIT AS DEFINED BY IEC-950, EN60950, UL1950/CSA950
 (2) PRIMARY INDUCTANCE = 700mH MINIMUM

PACKAGE " 1 "

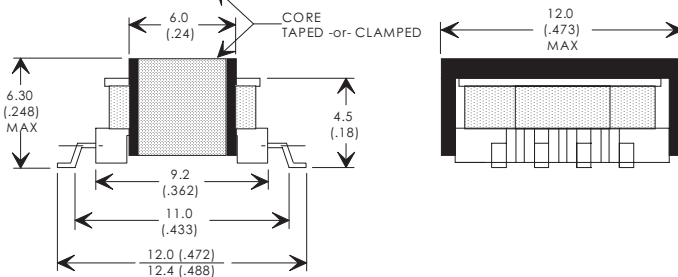
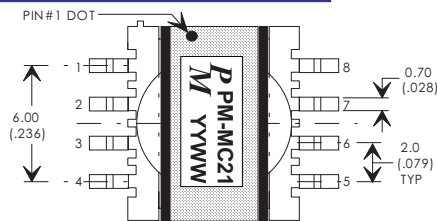
RECOMMENDED PCB LAYOUT
TOP VIEW



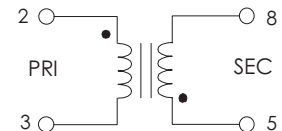
SCHEMATIC " A "



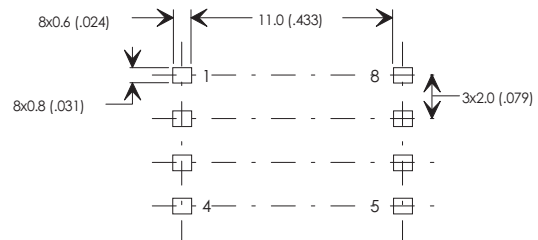
PACKAGE " 2 "



SCHEMATIC " B "



RECOMMENDED PCB LAYOUT

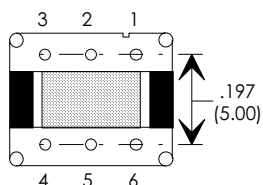
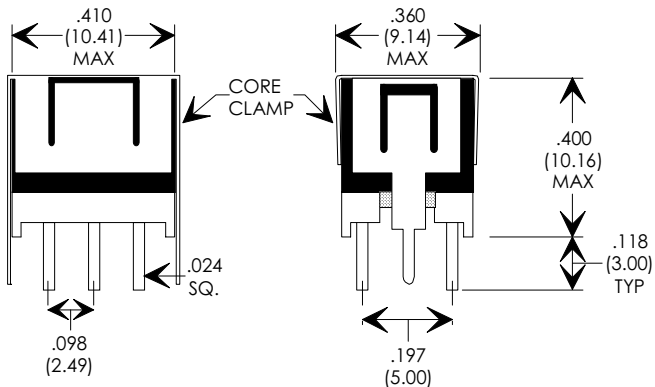
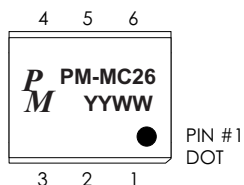


Specifications subject to change without notice.

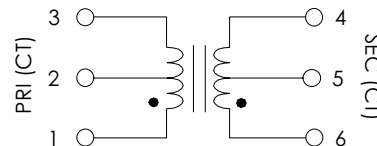
pmmc 06/04

FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

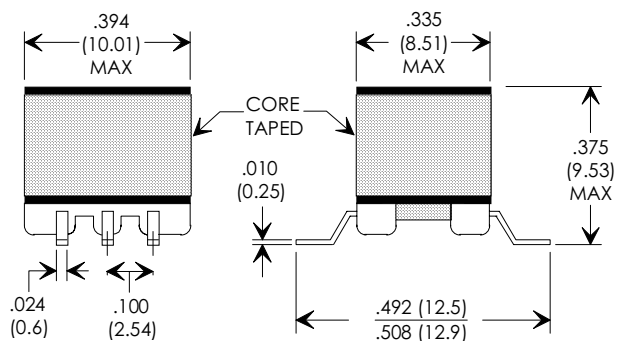
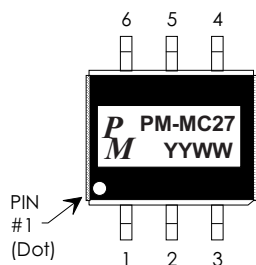
PACKAGE " 3 "



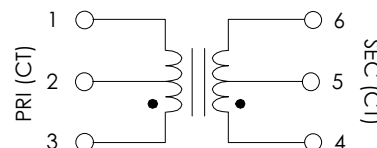
SCHEMATIC " C "



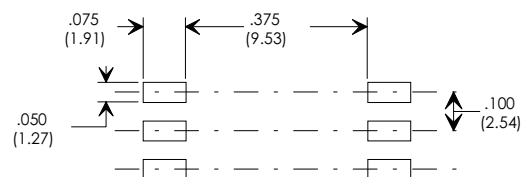
PACKAGE " 4 "



SCHEMATIC " D "



RECOMMENDED PCB LAYOUT



FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

FEATURES:

- ① Designed to Meet FCC Part 68
- ② Developed for PCMCIA Type II Card
- ③ For 56.6kbps Technologies
- ④ Designed for V.29, V.32, V.32, V.90 Bis & V.Fast Apps.

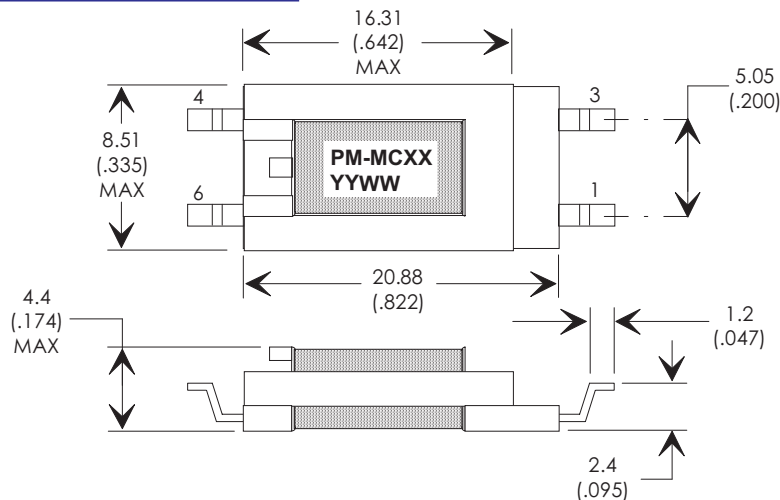
GENERAL SPECIFICATIONS:

Turns Ratio (Pri:Sec) 1:1 $\pm$ 2%
 Longitudinal Balance:
 MC10 200 to 1000 Hz 40 dB Min.
 1000 to 4000 Hz 60 dB Min.
 MC60 200 to 1000 Hz 60 dB Min.
 1000 to 4000 Hz 40 dB Min.

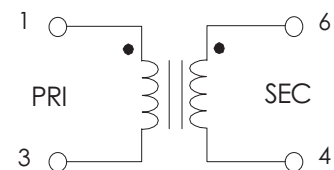
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

PART NUMBER	Package/Schematic	Primary DC Current (mA Max)	DCR ($\Omega \pm 10\%$)		Pri = 600 Ω with Load of (Ω)	Ins. Loss @ 1KHz (dB Max.)	Harm Dist @ 600Hz (dB MAX)	Ret Loss @ 1800Hz (dB Min.)	Frequency Response (+dB) 200Hz - 4000Hz	HI-POT Vrms
PM-MC10	5 / E	0	155	145	297	3.5	-82	14.0	0.20	1650
PM-MC60	6 / F	0	108	120	374	2 $\pm$.25	-82	15.0	0.25	1500

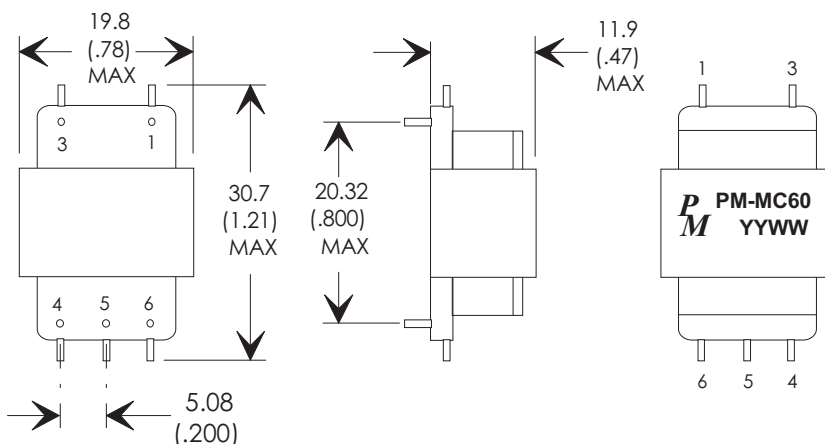
PACKAGE " 5 " "



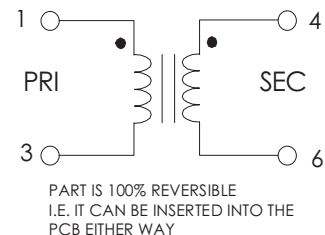
SCHEMATIC " E " "



PACKAGE " 6 " "



SCHEMATIC " F " "



WIDEBAND RF PULSE COUPLING TRANSFORMERS

- ① Designed for use in 50 Ω WideBand R.F. and Fast Rise Time Applications
- ② Impedance Levels from 12.5 to 800 Ohms
- ③ Low Insertion Loss, 500Vrms Isolation
- ④ Frequency Range 10 KHz to 500 MHz
- ⑤ 6-Pin DIP & Gull Wing Packages

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO ($\pm 5\%$)	PRIMARY Inductance (μH Min.)	ET V- μsec (Min.)	Rise Time ns Max	PRI-SEC Cw/w (pf Max.)	PRI / SEC L_L (μH Max.)	PRI DCR (Ω Max.)	SEC DCR (Ω Max.)	-3dB Bandwidth MHz		Sch-matic
									Low	High	
PM-WT01	1:1	80	2.50	2.20	12	0.15	0.20	0.20	0.05	110	B
PM-WT02	1:2	40	2.00	3.00	15	0.14	0.20	0.30	0.10	110	B
PM-WT03	1:4	20	1.25	6.00	10	0.10	0.20	0.60	0.20	60	B
PM-WT04	1:1ct	80	2.50	3.00	15	0.18	0.20	0.20	0.05	90	E
PM-WT05	1:2ct	40	2.00	3.00	15	0.14	0.20	0.30	0.10	110	E
PM-WT06	1:4ct	20	1.25	6.00	10	0.10	0.20	0.60	0.20	60	E
PM-WT07	1ct:1ct	80	2.50	3.00	15	0.18	0.20	0.20	0.05	90	C
PM-WT08	1ct:2ct	40	2.00	3.00	15	0.14	0.20	0.30	0.10	110	C
PM-WT09	1:1:1	40	2.00	2.00	12	0.10	0.20	0.20	0.10	150	A
PM-WT10	1ct:1ct	800	4.00	6.00	20	0.30	0.26	0.26	0.005	100	C

THRU-HOLE OR SURFACE MOUNT:

Table Part Numbers are THRU-HOLE
Change the "T" to "G" for SURFACE MOUNT.

Example:

PM-WT01 = THRU-HOLE

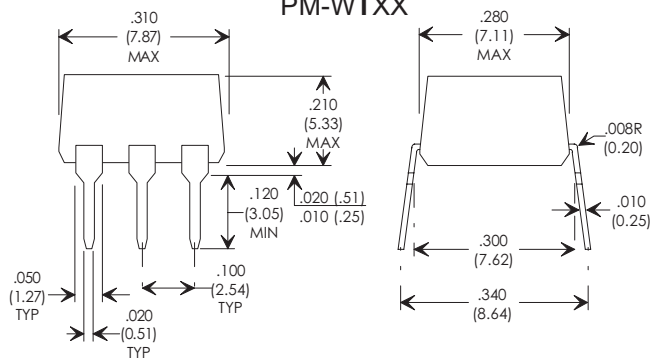
PM-WG01 = SURFACE MOUNT

VARIATIONS AVAILABLE. FOR INTERMEDIATE VALUES AND/OR CUSTOM DESIGNS PLEASE CONSULT THE FACTORY.

MECHANICAL

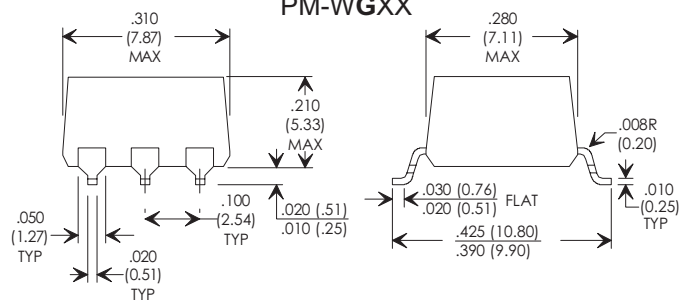
THRU-HOLE PACKAGE

PM-WTXX



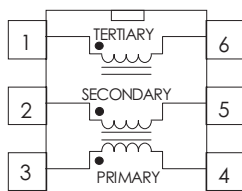
SURFACE MOUNT PACKAGE

PM-WGXX

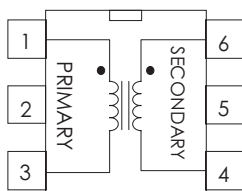


SCHEMATICS

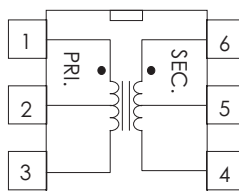
SCHEMATIC "A"



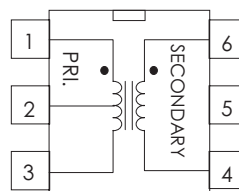
SCHEMATIC "B"



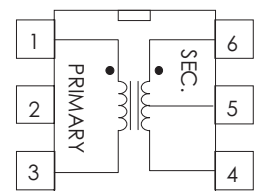
SCHEMATIC "C"



SCHEMATIC "D"



SCHEMATIC "E"



Specifications subject to change without notice.

pm-wt&wg 08/99

20381 BARENTS SEA CIRCLE, LAKE FOREST, CA 92630 • TEL: (949) 452-0511 • FAX: (949) 452-0512 • <http://www.premiermag.com>

FIBRE CHANNEL COUPLING TRANSFORMERS

- ① Optimized for Copper Media Applications of Fast Ethernet & FDDI
- ② For use in 150 Ω or 75 Ω Systems to ANSI X3T9.5
- ③ Frequency Range 2 MHz to 450 MHz
- ④ 2000Vrms Isolation (Hi-Pot)

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

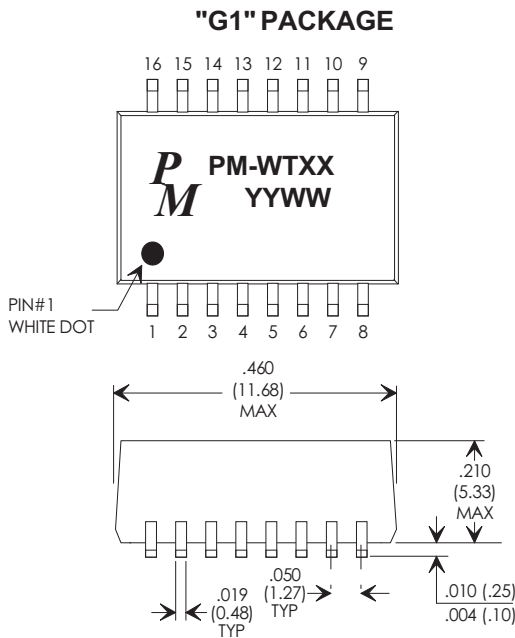
PART NUMBER	CABLE MEDIA TYPE	Baud Rate (MHz)	PRIMARY* Inductance (μ H Typ.)	TURNS RATIO ($\pm$ 5%)	PRI-SEC Cw/w (pf Max.)	PRI / SEC L_L (μ H Max.)	PRI/SEC DCR (Ω Max.)	Rise Time (ns Max.)	-3dB Bandwidth MHz	
									Low Max.	High Typ.
PM-WT75	75 Ω /150 Ω	266+	7.0	1:1	2.5	0.08	0.15	0.50	2.5	410
PM-WT76	75 Ω /150 Ω	266+	7.0	1ct:1ct	2.5	0.08	0.15	0.50	2.5	350
PM-WT150	150 Ω STP	266	15.0	1:1	2.5	0.08	0.15	0.80	2.0	410
PM-WT20	75 Ω Coax	133	30.0	1:1	4.0	0.10	0.20	1.50	0.5	250
PM-WT30	150 Ω STP	133	60.0	1:1	5.5	0.10	0.20	2.00	0.5	200

APPLICATION NOTE:

The PM-WT75 & PM-WT150 versions have been optimized for use with 8B/10B code and NRZ modulation as used in HOTLink™ for communication. One of the main advantages of 8B/10B code is the elimination of baseline wander concerns (DC bias). Methods of encoding that are not DC balanced, such as FDDI 4B/5B require a compromise in the magnetics design as more turns (higher inductances) are necessary to combat the DC imbalance. Thus the major design consideration for 8B/10B code was to provide sufficient high end bandwidth to allow passage of at least the 3rd harmonic. In a system operating at a 266 MHz baud rate this 3rd harmonic is at 399MHz. The PM-WT75 should be used for both 75 Ω & 150 Ω applications using 8B/10B coding @ $\geq$ 266MHz Baud Rates.

HOTLink™ is a Trade Mark of CYPRESS SEMICONDUCTOR Inc.
CY7B923 HOTLink™ Transmitter & CY7B933 HOTLink™ Receiver.

MECHANICAL



SCHEMATIC

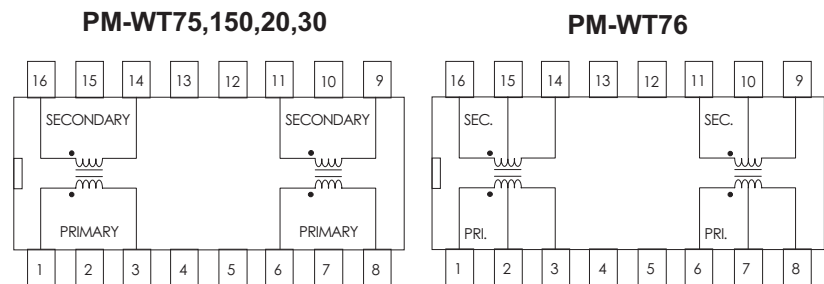


FIGURE 3: RECOMMENDED PCB LAYOUT

Specifications subject to change without notice.

pm-wt&wg 08/99

PM-CIXX CURRENT SENSE INDUCTORS

- ① Designed for Switch Mode Power Supply Applications
- ② Frequency Range from 10KHz to 200KHz
- ③ Fully Encapsulated Construction
- ④ Tapped and Untapped Versions
- ⑤ 2500Vrms Minimum Isolation Voltage
- ⑥ Center Hole for Primary Lead

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +80°C

CONTROL VALUES				REFERENCE VALUES				CALC. VALUES		SCHEMATIC
PART NUMBER	URNS $N_s \pm 1\%$	INDUCTANCE L_s (mH Min.)	DCR R_s (Ohms Max.)	I_{pk} (Amps)	R_T (Ohms)	K_V (Volt/Amp)	DROOP (%)	FLUX FACTOR K_B	LOSS FACTOR K_L	
PM-CI01	50	5.0	0.70	35	15	0.30	2.4	273.97×10^3	3.31×10^{-9}	A
PM-CI02*	100	20.0	1.40	50	50	0.50	2.0	68.49×10^3	3.33×10^{-9}	A
PM-CI03	200	80.0	4.50	50	200	1.00	2.0	17.12×10^3	3.35×10^{-9}	A
PM-CI04	300	180.0	9.00	75	300	1.00	1.4	7.61×10^3	3.37×10^{-9}	A
PM-CI05	50ct†	5.0	0.70	35	15	0.30	2.4	273.97×10^3	3.31×10^{-9}	B
PM-CI06	100ct†	20.0	1.40	50	50	0.50	2.0	68.49×10^3	3.33×10^{-9}	B
PM-CI07	200ct†	80.0	4.50	50	200	1.00	2.0	17.12×10^3	3.35×10^{-9}	B
PM-CI08	300ct†	180.0	9.00	75	300	1.00	1.4	7.61×10^3	3.37×10^{-9}	B

NOTE: * PM-CI02* TRIM THE PIN LENGTH = 0.12" - 0.15" PER CUSTOMER PO ONLY.

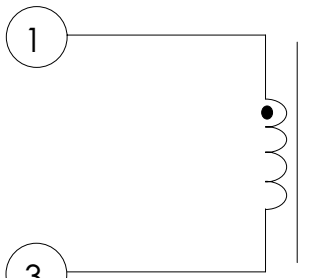
REFER TO CALCULATION EXAMPLE FOR PM-CIXX SERIES ON PAGE 2 OF THIS DATA SHEET.

- 1) REFERENCE VALUES ARE FOR UNIPOLAR OPERATION @ 50KHz, 40% DUTY CYCLE ($D_{max} = .40$).
- 2) THE MAXIMUM USABLE PEAK SENSE CURRENT (I_{pk}) IS DEPENDENT ON CORE SATURATION FACTORS AND SHOULD BE EVALUATED FOR THE ACTUAL OPERATING CONDITIONS. SEE APPLICATION DATA AND EXAMPLE ON PAGE 78.
- 3) THE MAXIMUM RECOMMENDED OPERATING FLUX DENSITY (B_{op}) @ AN OPERATING TEMPERATURE OF 105°C IS 2000 GAUSS.
- 4) THE TERM. RESISTOR (R_T) CAN BE VARIED TO ADJUST THE OPERATING FLUX DENSITY (B_{op}), DROOP, AND SCALE FACTOR (K_V).
- 5) THE SCALE FACTOR (K_V) IS PROPORTIONAL TO THE TERMINATING RESISTOR (R_T) AND IS EQUAL TO 1VOLT/AMP WHEN $R_T = N_s$
- 6) SECONDARY INDUCTANCE IS MEASURED AT 20KHz, 1.0VRMS.

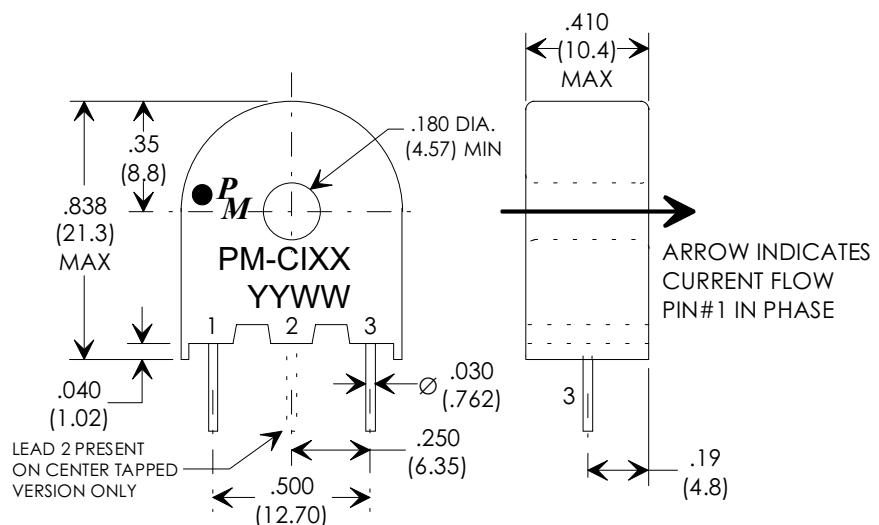
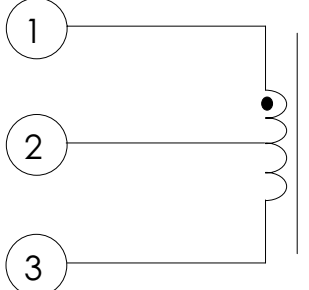
SCHEMATIC

MECHANICAL

SCHEMATIC "A"



SCHEMATIC "B"



Specifications subject to change without notice.

pmci 4/97

APPLICATION EXAMPLE

APPLICATION EXAMPLE

GIVEN:

Part# = PM-CI02

Peak Current (I_{PK}) = 30.0 Amps

Terminating Resistor (R_T) = 100 Ohms

Operating Frequency (f) = 100KHz

Duty Cycle (D_{max}) = .40 (40% on time)

CALCULATE OPERATING FLUX DENSITY

From the Table the FLUX FACTOR is:

$$K_B = 68.49 \times 10^3$$

Flux Utilization Constant (K_F) is:

1.0 For Unipolar Operation

2.0 For Bipolar Operation

THEN:

$$B_{OP} = K_B \times I_{PK} \times R_T \times (D_{max} / K_F \times f)$$

$$= 68.49 \times 10^3 \times 30 \times 100 \times (.4 / 1 \times 100 \times 10^3)$$

$$= 822 \text{ gauss (OK less than 2000 gauss)}$$

CALCULATE PULSE DROOP

From the Table the Secondary Inductance is:

$$L_S = 20 \text{ mH Minimum}$$

Note: The actual droop is dependent on the actual L_S in the circuit's environment.

$$\text{Droop Exponent (D)} = R_T \times D_{max} / (L_S \times f)$$

$$= 100 \times .4 / (20 \times 10^{-3} \times 100 \times 10^3)$$

$$= 0.020$$

THEN:

$$\%_{\text{Droop}} = (1 - e^{-D}) \times 100$$

$$= 1.98 \%$$

OK less than 10%

(Depending on the application)

Droop to 20% may be acceptable)

CALCULATE THE SCALE FACTOR

From the Table the Secondary Turns are:

$$N_S = 100$$

THEN:

$$K_V = R_T / N_S$$

$$= 100 / 100$$

$$= 1 \text{ volt/amp}$$

ESTIMATE ERROR DUE TO LOSSES

From the Table the Secondary DCR is:

$$R_S = 1.40 \text{ Ohms Maximum}$$

From the Table the approximate Loss Factor is:

$$K_L = 3.33 \times 10^{-9}$$

Note: The loss factor (K_L) is valid approximation from 10KHz to 200KHz

Secondary Copper Losses are:

$$P_{\text{loss}_S} = (I_{PK} / N_S)^2 \times R_S$$

$$= (30/100)^2 \times 1.40$$

$$= 0.126 \text{ Watt}$$

Core losses are:

$$P_{\text{loss}_C} = K_L^2 \times f^{1.621} \times B_{OP}^{2.569}$$

$$= (3.33 \times 10^{-9})^2 \times (100 \times 10^3)^{1.621} \times 822^{2.569}$$

$$= 0.0435 \text{ Watt}$$

Output Power is:

$$P_{\text{out}_S} = (I_{PK} / N_S)^2 \times R_T$$

$$= (30/100)^2 \times 100$$

$$= 9.00 \text{ Watt}$$

THEN:

$$\%_{\text{Error}} = [(P_{\text{loss}_S} + P_{\text{loss}_C}) / P_{\text{out}}] \times 100$$

$$= [(.126 + .0435) / 9] \times 100$$

$$= 1.88 \%$$

PM-CSXX CURRENT SENSE TRANSFORMERS

- ① Designed for Switch Mode Power Supply Applications
- ② Frequency Range from 10KHz to 200KHz
- ③ Fully Encapsulated Construction
- ④ Tapped and Untapped Versions
- ⑤ 2500Vrms Minimum Isolation Voltage
- ⑥ Primary Lead Included

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +80°C

CONTROL VALUES				REFERENCE VALUES				CALC. VALUES		SCHEMATIC
PART NUMBER	URNS $N_s \pm 1\%$	INDUCTANCE L_s (mH Min.)	DCR R_s (Ohms Max.)	I_{pk} (Amps)	R_T (Ohms)	K_V (Volt/Amp)	DROOP (%)	FLUX FACTOR K_B	LOSS FACTOR K_L	
PM-CS01	50	5.0	0.70	35	15	0.30	2.4	273.97×10^3	3.31×10^{-9}	A
PM-CS02	100	20.0	1.40	50	50	0.50	2.0	68.49×10^3	3.33×10^{-9}	A
PM-CS03	200	80.0	4.50	50	200	1.00	2.0	17.12×10^3	3.35×10^{-9}	A
PM-CS04	300	180.0	11.00	75	300	1.00	1.4	7.61×10^3	3.37×10^{-9}	A
PM-CS05	50ct†	5.0	0.50	35	15	0.30	2.4	273.97×10^3	3.31×10^{-9}	B
PM-CS06	100ct†	20.0	1.00	50	50	0.50	2.0	68.49×10^3	3.33×10^{-9}	B
PM-CS07	200ct†	80.0	2.00	50	200	1.00	2.0	17.12×10^3	3.35×10^{-9}	B
PM-CS08	300ct†	180.0	3.00	75	300	1.00	1.4	7.61×10^3	3.37×10^{-9}	B

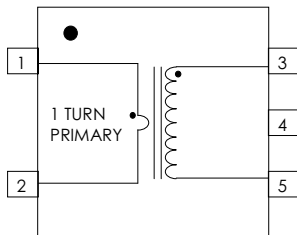
REFER TO CALCULATION EXAMPLE FOR PM-CSXX SERIES ON PAGE 2 OF THIS DATA SHEET.

- 1) REFERENCE VALUES ARE FOR UNIPOLAR OPERATION @ 50KHz, 40% DUTY CYCLE ($D_{max} = .40$).
- 2) THE MAXIMUM USABLE PEAK SENSE CURRENT (I_{pk}) IS DEPENDENT ON CORE SATURATION FACTORS AND SHOULD BE EVALUATED FOR THE ACTUAL OPERATING CONDITIONS. SEE APPLICATION DATA AND EXAMPLE ON PAGE 80.
- 3) THE MAXIMUM RECOMMENDED OPERATING FLUX DENSITY (B_{op}) @ AN OPERATING TEMPERATURE OF 105°C IS 2000 GAUSS.
- 4) THE TERM. RESISTOR (R_T) CAN BE VARIED TO ADJUST THE OPERATING FLUX DENSITY (B_{op}), DROOP, AND SCALE FACTOR (K_V).
- 5) THE SCALE FACTOR (K_V) IS PROPORTIONAL TO THE TERMINATING RESISTOR (R_T) AND IS EQUAL TO 1VOLT/AMP WHEN $R_T = N_s$
- 6) SECONDARY INDUCTANCE IS MEASURED AT 20KHz, 1.0VRMS.

SCHEMATIC

SCHEMATIC "A"

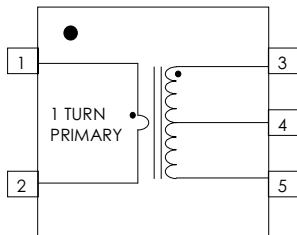
WHITE DOT
DENOTES PIN #1



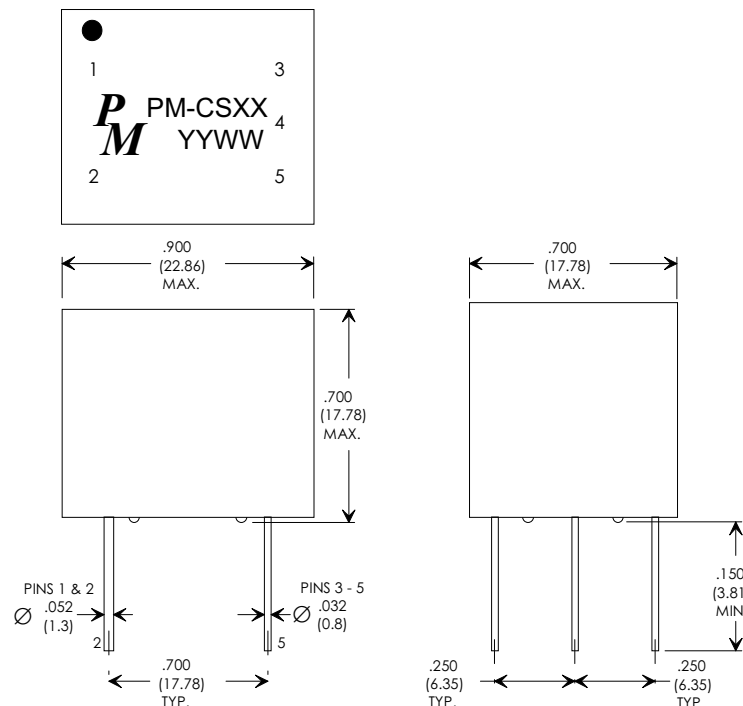
UNUSED PINS MAY BE OMITTED

SCHEMATIC "B"

WHITE DOT
DENOTES PIN #1



MECHANICAL



Specifications subject to change without notice.

pmcs 5/99

SWITCH MODE DC/DC POWER CONVERSION TRANSFORMERS

- ① Designed for use with Leading Controller Chips
- ② Provides DC/DC Conversion & Isolation

- ③ Design Engineering Support Available
- ④ Multiple Configurations

GENERAL APPLICATION INFORMATION

Premier Magnetics' Switch Mode Output transformers have been designed for use with the most popular current-mode switching regulators such as Linear Technologies LT1X7X & National Semiconductors LM25XX series of High Efficiency Switching Regulators. These output transformers have been optimized to provide maximum power throughput in the smallest packages currently available. This combination of components finds wide use in Distributed Power Systems where a main dc voltage bus is converted for use on or near the circuits being served.

These types of switching regulators provide a very simple solution to power conversion designs. The inductor or transformer used are critical to the overall performance of the converter and typically define the overall efficiency, output power and physical size.

The following tables of transformers were designed for use in the Flyback Buck-Boost circuit configuration. This conversion topology allows the output voltage to be regulated higher or lower than the input voltage. It can also provide isolated or non-isolated multiple outputs. Typical efficiency of this topology is 75%.

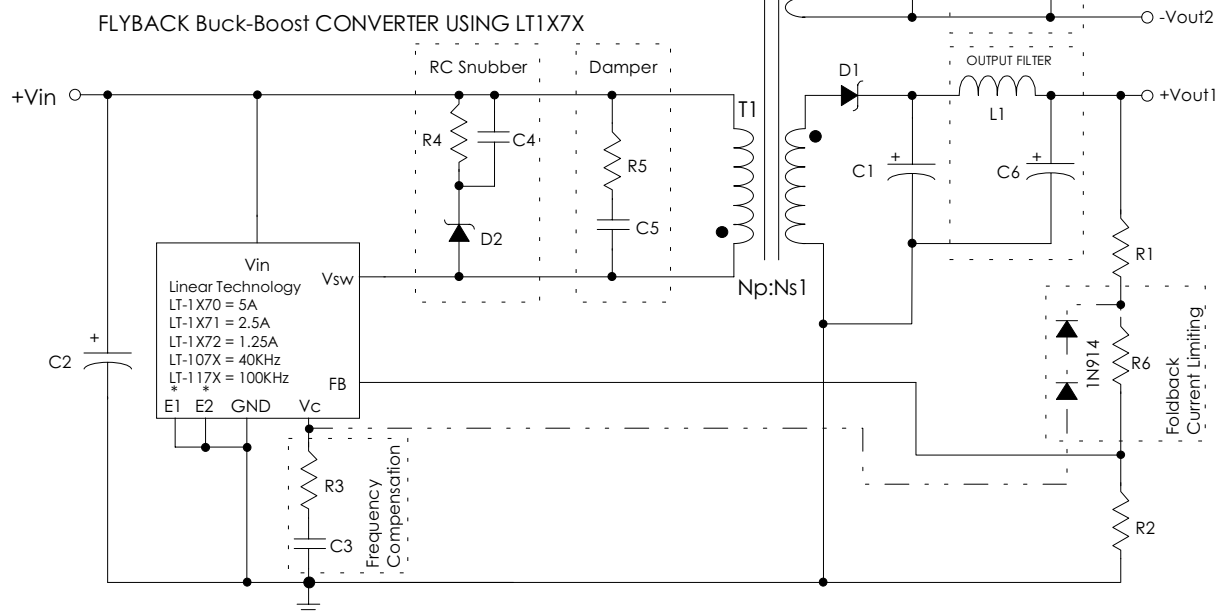
Below is a typical application circuit utilizing Linear Technologies LT1X7X switching regulator in the flyback buck-boost configuration. The use of Premier's VTP-01XXX or VTK-01XXX optional output filter choke will drastically reduce output ripple and noise. The component values listed are intended for reference purposes only. The Output Filter(s), Damper Network & Foldback Current Limiting Network are optional depending on the specific application.

General Component Values:

R3 = 1.0K 1/8W
C3 = 2.2uF Film
R4 = 1.5K 1W Snubber
C4 = .47uF Film
R5 = 2.0K 1W
C5 = 0.1uF Ceramic
L1 = 10uHy @ Rated DC amps (VTP-XXXX)
L2 = 10uHy @ Rated DC amps (VTP-XXXX)
R1 = 1% Metal Film, For 5Vdc = 3.0K, For 9Vdc = 9.09K
R2 = 1% Metal Film, For 5Vdc = 1.0K, For 9Vdc = 1.5K
C2 = Input Bypass Capacitor 100uF Electrolytic

D1 = MBRXXX, Schottky Rectifier
D2 = MBRXXX, Schottky Rectifier
D3 = MBRXXX, Schottky Rectifier
C1 = Electrolytic
C7 = Electrolytic
R6 = 1% Metal Film as needed.
C6 = 1000uF Electrolytic
C8 = 1000uF Electrolytic

SCHEMATIC



Specifications subject to change without notice.

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SWITCH MODE DC/DC POWER CONVERSION TRANSFORMERS

GENERAL ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

To receive complete specifications & application information, request the respective part number data sheet.

PART NUMBER	Designed For Use With	APPLICATION			PRIMARY OCL μ HY Typ.	HI-POT Vdc Min.	Temp Rise °C Typ.	General Notes	PCB Mount Method
		Vin (Vdc)	Vout (Vdc)	Io_max (mA)					
PM-SM02	LT1071	12.0	5.0	1000	140	550	20	Feed Back Output	THRU
PM-SM03	LT1071	12.0	9.0	1000	110	550	35	Feed Back Output	THRU
PM-SM04	LT1071	24.0	5.0	2000	200	550	40	Feed Back Output	THRU
PM-SM05	LT1071	24.0	5.0	2000	200	550	40	Feed Back Output	THRU
PM-SM07	LT1070	12.0	5.0	2000	50	550	40	Feed Back Output	THRU
PM-SM09	LT1070	12.0	5.0	4000	135	250	50	Feed Back Output	THRU
TSD-546 Output #2	LT1072	12.0 -----	5.0 9.0	220 160	250 -----	550 550	15 -----	Feed Back Output Isolated Output	THRU
TSD-578 Output #2 Output #3 = Tap off #2	LT1072	24.0 ----- -----	5.0 5.0 6.0	100 200 32	1000 ----- -----	500 500 -----	15 ----- -----	Isolated Output #1 Isolated Output #2 Tap Output off #2	THRU
TSD-648 Outputs #2 & #3: ± 15.0	LT1171	5.0 -----	5.0 ± 15.0	60 ± 100	48 -----	750 750	15 -----	Isolated Output, Opto F.B. Isolated + Linear Reg.	SMD
TSD-649	LT1076HV	18-50	15.0	700	80	N/A	15	Positive Buck	SMD
TSD-652 Output #2 = Auxiliary	MAX783	5.5-30 -----	3.3 15.0	3100 220	10 -----	500 500	10 -----	Positive Buck Auxiliary Output	SMD
TSD-723	LT1070	12.0	15.0	2000	210	550	30	Isolated Output	THRU
TSD-725 13V TAP Output 15V TAP Output	LT1172	12.0 ----- -----	5.0 13.0 15.0	500 150 60	100 ----- -----	550 ----- -----	15 ----- -----	Feed Back Output Tap Output Tap Output	SMD
TSD-726 Output #2, 13V TAP Output #3, 15V TAP	LT1172	12.0 ----- -----	5.0 13.0 15.0	100 40 200	100 ----- -----	100 ----- -----	15 ----- -----	Feed Back Output Tap Output Tap Output	SMD
TSD-727	LT1172	9-33	5.0	200	1000	1000	10	Isolated Output	THRU
TSD-730 Output #2 & #3: $\pm 15V$ (TSD-933 = THRU VERSION)	LT1172	18-30 -----	5.0 ± 15.0	250 ± 25	1000 -----	500 500	10 -----	Isolated Output Isolated Output	SMD
DISCRETE SELF OSCILLATING PUSH-PULL CONVERTERS, DUAL SECONDARIES									
TSD-643 40KHz Full Wave C.T. Full Brige Dual Full Brige		12.0 ----- -----	24 48 ± 24	420 210 ± 210	2300	3750 3750 3750	25	Isolated Output Isolated Output Isolated Output	THRU
TSD-644 40KHz Full Wave C.T. Full Brige Dual Full Brige		12.0 ----- -----	100 200 ± 100	50 25 ± 25	2300	3750 3750 3750	25	Isolated Output Isolated Output Isolated Output	THRU
TSD-645 40KHz Full Wave C.T. Full Brige Dual Full Brige		52.0 ----- -----	100 200 ± 100	100 50 ± 50	6800	3750 3750 3750	25	Isolated Output Isolated Output Isolated Output	THRU
TSD-742 1.0KHz DC to AC		1.5-3.5	85rms	8 rms	31mH	500	10	Isolated rms Output	SMD
TSD-750 Output #2	LT1172	10-30 -----	24.0 24.0	50 50	610 -----	500 500	10 -----	Isolated Output Isolated Output	SMD

Specifications subject to change without notice.

pmsm 6/97



SWITCH MODE DC/DC POWER CONVERSION TRANSFORMERS

GENERAL ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

To receive complete specifications & application information, request the respective part number data sheet.

PART NUMBER	Designed For Use With	APPLICATION			PRIMARY OCL μ HY Typ.	HI-POT Vdc Min.	Temp Rise °C Typ.	General Notes	PCB Mount Method
		Vin (Vdc)	Vout (Vdc)	Io_max (mA)					
TSD-769	LT1071	9-32	32.0	100	410	500	25	Isolated Output	THRU
Output #2		-----	20.0	100	-----	500	-----	Isolated Output	
Output #3 = Auxiliary		-----	8.0	20	-----	500	-----	Isolated Output	
TSD-826	LT1171	7-16	5.0	500	55	500	25	Feed back Output	SMD
Output #2		-----	-5.0	20	-----	500	-----	Second Output	
Outputs #3 & #4: $\pm 48V$		-----	± 48.0	± 50	-----	500	-----	Isolated Outputs $\pm 48V$	
TSD-834	UC2843	130-260	+5.0	+1000	324	1500	15	Isolated Output, Opto F.B.	THRU
Output #2		-----	-5.0	-10	-----	-----	-----	Isolated Output	
TSD-839	LT1171	12.0	+9.0	+250	150	300	15	Isolated Output, Opto F.B.	SMD
Output #2 & #3: $\pm 20Vdc$		-----	± 20.0	± 80	-----	-----	-----	Isolated Output	
Output #4 & #5: $\pm 30Vdc$		-----	± 30.0	± 10	-----	-----	-----	Isolated Output	
TSD-841	LT1070	5-30V	-180.0	-50	45	500	20	Isolated Output, Opto F.B.	THRU
Output #2		-----	+60.0	+50	-----	-----	-----	Isolated Output	
TSD-849	UC2843	100-280	+5.0	+450	292	1500	15	Isolated Output, Opto F.B.	SMD
3.3V TAP Output		-----	+3.3	+200	-----	-----	-----	Tap Output	
Output #2		-----	-5.5	-100	-----	-----	-----	Isolated Output	
TSD-850	UC2843	100-280	-48.0	-40	200	1500	15	Isolated Output, Opto F.B.	SMD
Output #2		-----	-65.0	-75	-----	-----	-----	Isolated Output	
-24V TAP Output off #2		-----	-24.0	-150	-----	-----	-----	Tap Output	
TSD-851	UC2843	120-260	-48.0	-20	324	1500	15	Isolated Output, Opto F.B.	THRU
-28V TAP Output		-----	-28.0	-200	-----	-----	-----	Tap Output	
TSD-852	UC2843	130-260	+12.0	+100	324	1500	15	Isolated Output, Opto F.B.	THRU
Output #2		-----	-160.0	-200	-----	-----	-----	Isolated Output	
TSD-878	LT1170	24.0	5.0	1250	68	1500	30	Isolated Output, Opto F.B.	THRU
Output #2		-----	12.0	1250	-----	-----	-----	Isolated Output	
TSD-879	LT1170	24.0	± 12.0	± 250	150	1500	15	Isolated Output, Opto F.B.	SMD
TSD-887	LT1170	15-21	175.0	120	63.0	1000	20	Direct Feedback	THRU
TSD-906	LM2588T WITH REG'S	24.0	5.0	2500	160	1000	15	Isolated Output, Opto F.B.	THRU
Output #2		-----	15.0	1000	-----	-----	-----	Iso. Linear Reg Output	
TSD-913	LT1171	10-30	5.0	1200	100.0	1500	10	Isolated Output, Opto F.B.	THRU
TSD-933	LT1172	18-30	5.0	250	1000	500	10	Isolated Output	THRU
Output #2 & #3		-----	± 15.0	± 25	-----	500	-----	Isolated Output	
TSD-980	LT1082	12-40	12.0	125	1300	1500	10	Isolated Output	THRU
Output #2		-----	12.0	125	-----	1500	-----	Isolated Output	
TSD-989	LT1172	8-40	5.0	200	100	-----	10	Direct Feedback Output	SMD
Output #2 & #3		-----	± 10.0	± 50	-----	500	-----	Isolated Output	
TSD-1040	LT1172	8-40	5.0	200	110	-----	10	Direct Feedback Output	SMD
Output #1		-----	12.0	80	-----	250	-----	Isolated Output #1	
Output #2		-----	20.0	80	-----	250	-----	Isolated Output #2	
TSD-1145	LM2585-5.0	6-18	5.0	600	64.0	250	15	Direct Feedback	SMD

Specifications subject to change without notice.

pmsm 6/97

20381 BARENTS SEA CIRCLE, LAKE FOREST, CA 92630 • TEL: (949) 452-0511 • FAX: (949) 452-0512 • <http://www.premiermag.com>

8-PIN SMD PUSH-PULL TRANSFORMERS

- ① Designed to Support Maxim's MAX253
- ② 1500Vrms Minimum Isolation Voltage
- ③ Designed For $\geq 125\text{KHz}$, 50% Duty Cycle Push-Pull Operation @ 1.0 Watt Output

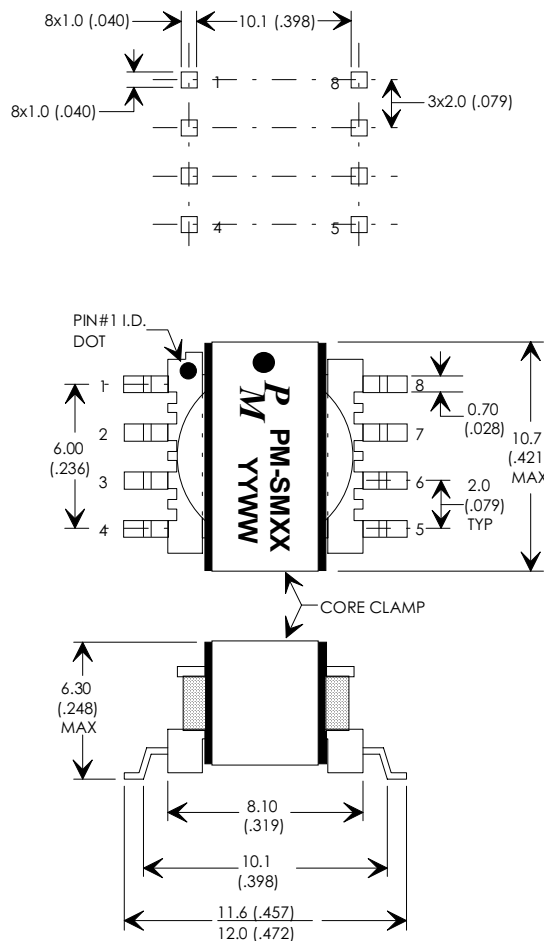
- ④ Low profile 8-Pin SMD Package
- ⑤ Industry Standard Package
- ⑥ Multiple Configurations

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

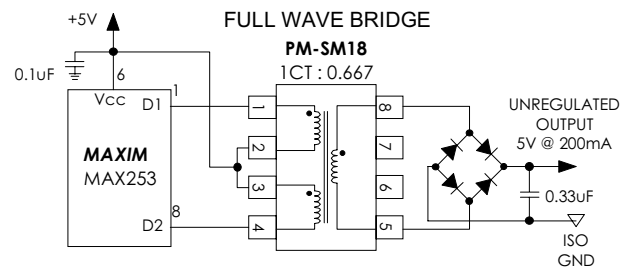
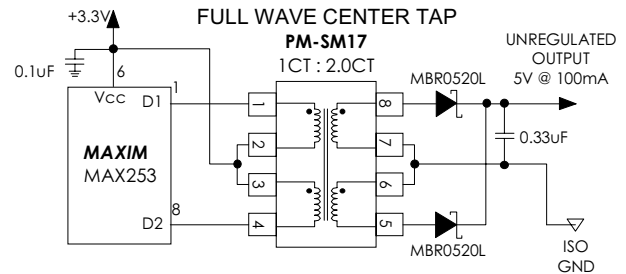
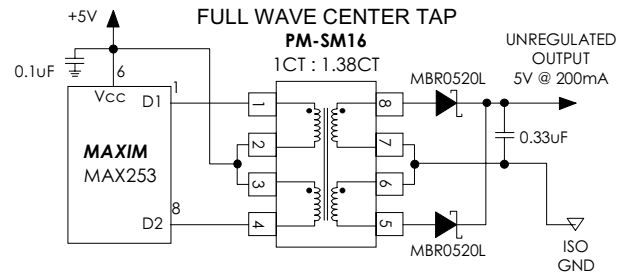
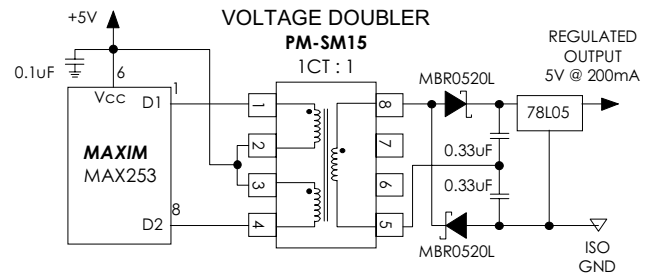
PART NUMBER	TURNS RATIO (Pri:Sec $\pm 5\%$)	PRIMARY OCL (μH Min.)	Primary Pins	TYPICAL APPLICATION	PRI/SEC HI-POT (Vrms)	GENERAL CHARACTERISTICS
PM-SM15	1CT : 1.00	150	1-4	+5V to +10V	1500	Volt Doubler Driving a Regulator
PM-SM16	1CT : 1.38CT	150	1-4	+5V to +5V	1500	Full Wave Center Tap
PM-SM17	1CT : 2.00CT	150	1-4	+3.3V to +5V	1500	Full Wave Center Tap
PM-SM18	1CT : 0.667	150	1-4	+5V to +5V	1500	Full Wave Bridge

MECHANICALS

RECOMMENDED P.C.B. LAYOUT



TYPICAL APPLICATIONS



Specifications subject to change without notice.

pmsm15 7/97



LOW COST TOROIDAL POWER INDUCTORS

FEATURES

- ① Powdered Iron Toroidal Construction
- ② Optimized For Use as High Frequency DC Chokes
- ③ Temp Rise Data: Ripple Currents $\leq 10\%$ @ 100KHz
- ④ Low Cost Self Lead Construction

NOTES: Temp Rise T1 & T2 are Calculated.

- 1) L_n = Nominal Ind. @ 0.0Adc
L1 = Nominal Ind. @ I1 Adc, T1 Temp Rise
L2 = Nominal Ind. @ I2 Adc, T2 Temp Rise
- 2) I1 Represents a 1-20% Drop in L_n
I2 Represents a 20-40% Drop in L_n

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

PART NUMBER	Ln (μH)	DCR (Ohm)	L1 @ I1 T1			L2 @ I2 T2			REF. DIMENSIONS IN INCHES				
			(μH)	(dc A)	(°C)	(μH)	(dc A)	(°C)	A	C	VT/B	HT/B	PIN OD
VTP-00301	3	0.020	3	1	10	2.8	2	30	.32	.15	.13	.30	.016
VTP-01001	10	0.032	10	1	12	9	2	46	.33	.24	.22	.31	.013
VTP-02001	20	0.035	20	1	7	17	2	27	.46	.25	.23	.43	.018
VTP-05001	50	0.061	46	1	6	40	2	23	.60	.32	.30	.57	.020
VTP-10001	100	0.106	91	1	9	75	2	34	.60	.46	.43	.57	.018
VTP-12001	120	0.075	115	1	5	102	2	14	.95	.53	.45	.90	.025
VTP-25001	250	0.168	229	1	7	188	2	27	.93	.46	.44	.90	.020
VTP-01002	10	0.016	10	2	12	8	4	48	.47	.26	.24	.44	.022
VTP-02002	20	0.024	18	2	11	14	4	43	.61	.27	.24	.58	.025
VTP-05002	50	0.031	48	2	5	41	4	20	.95	.49	.45	.91	.032
VTP-07002	70	0.039	61	2	11	48	4	43	.82	.36	.31	.82	.025
VTP-10002	100	0.043	89	2	6	72	4	24	.95	.63	.59	.91	.032
VTP-25002	250	0.068	222	2	6	178	4	24	1.24	.71	.67	1.20	.032
VTP-01005	10	0.006	10	5	6	8	10	22	1.00	.53	.47	.93	.051
VTP-02005	20	0.008	18	5	7	14	10	27	1.00	.67	.61	.93	.051
VTP-05005	50	0.013	47	5	7	36	10	27	1.29	.75	.69	1.22	.051
VTP-10005	100	0.023	83	5	11	61	10	44	1.54	.59	.53	1.48	.051
VTP-15005	150	0.029	122	5	9	90	10	34	1.85	.75	.69	1.79	.051
VTP-20005	200	0.033	155	5	10	109	10	39	1.85	.75	.69	1.79	.051
VTP-30005	300	0.038	241	5	14	175	10	36	2.18	1.00	.84	2.10	.051
VTP-02007	20	0.005	16	7	9	12	14	33	1.02	.70	.62	.95	.064
VTP-05007	50	0.009	42	7	8	31	14	30	1.58	.63	.55	1.50	.064
VTP-10007	100	0.015	78	7	9	55	14	34	1.88	.78	.70	1.80	.064
VTP-15007	150	0.025	145	7	7	110	14	26	2.35	1.25	1.18	2.28	.064
VTP-20007	200	0.030	177	7	8	131	14	29	2.35	1.25	1.18	2.28	.064
VTP-03408	34	0.008	26	8	16	22	12	30	1.25	0.62	0.55	1.23	.055
VTP-00510	5	0.005	5	10	12	4	16	25	1.03	.70	.65	.95	.064
VTP-01510	15	0.004	12	10	40	11	14	50	1.33	.80	.71	1.24	.064
VTP-05010	50	0.010	40	10	12	32	16	31	1.87	.78	.70	1.80	.064
VTP-25010	250	0.027	152	10	32	125	14	50	2.19	1.10	.85	2.10	.055
TSD-904	1.4	0.0017	1.2	11	25	1.0	15	40	0.75	0.40	.27	n/a	.051
VTP-07012	70	0.009	60	12	15	54	16	23	2.21	.98	.88	2.12	.018
VTP-01020	11	0.0025	8.5	20	30	7.5	25	42	1.45	.85	.73	1.26	.080
VTP-01025	12	0.0023	9.4	25	27	8.7	30	33	2.25	.95	.75	1.85	.100

Specifications subject to change without notice.

vtp 5/98

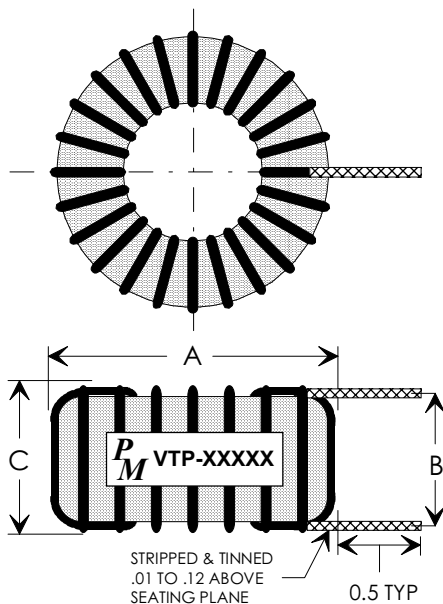
20381 BARENTS SEA CIRCLE, LAKE FOREST, CA 92630 • TEL: (949) 452-0511 • FAX: (949) 452-0512 • <http://www.premiermag.com>

LOW COST TOROIDAL POWER INDUCTORS

VTP-XXXX MECHANICAL

HTP-XXXX MECHANICAL

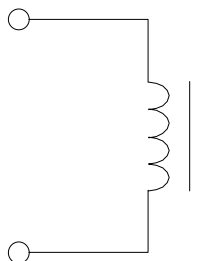
VTP-XXXXX OUTLINE
VERTICAL MOUNT



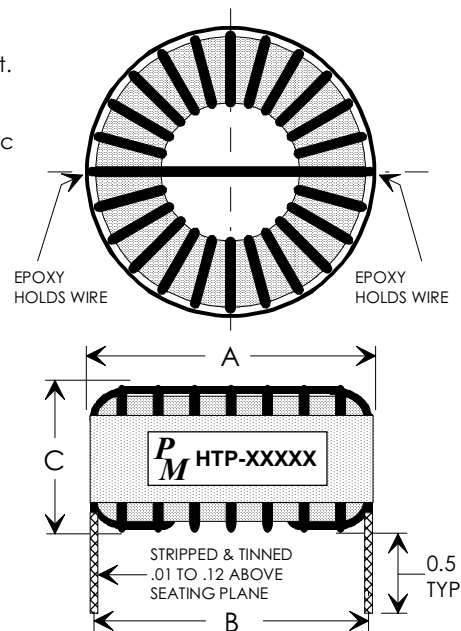
SCHEMATIC

HORIZONTAL OR VERTICAL MOUNT:

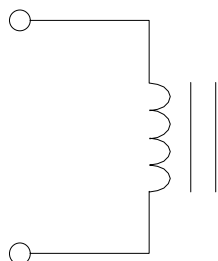
Table Part Numbers are Vertical Mount.
Change the "V" to "H" for Horizontal Mount.
Example:
VTP-05001 = Vertical Mount 50uH, 1.0Adc
HTP-05001 = Horizontal Mount 50uH, 1.0Adc



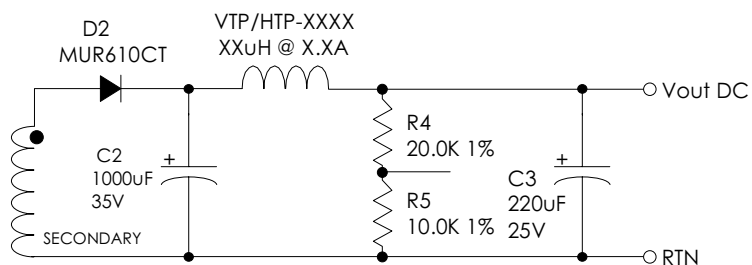
HTP-XXXXX OUTLINE
HORIZONTAL MOUNT



SCHEMATIC



APPLICATION



FOR INTERMEDIATE VALUES OR CUSTOM DESIGNS CONSULT THE FACTORY.



SENDUST TOROIDAL POWER INDUCTORS

FEATURES

- ① Sendust Powdered Iron Toroidal Construction
- ② Optimized For Use as High Frequency DC Chokes
- ③ Temp Rise Data: Ripple Currents $\leq 10\%$ @ 100KHz
- ④ Low Cost Self Lead Construction
- ⑥ Lower AC Losses Than Powdered Iron

NOTES: Temp Rise T1 & T2 are Calculated

- 1) L_n = Nominal Ind. @ 0.0Adc
 L_1 = Nominal Ind. @ I_1 Adc, T1 Temp Rise
 L_2 = Nominal Ind. @ I_2 Adc, T2 Temp Rise
- 2) I_1 Represents a 1-20% Drop in L_n
 I_2 Represents a 20-40% Drop in L_n

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

PART NUMBER	L_n (μ H)	DCR (Ohm)	L_1 (μ H)	@ I_1 (dc A)	T1 (°C)	L_2 (μ H)	@ I_2 (dc A)	T2 (°C)	REF. DIMENSIONS IN INCHES				
									A	C	VT/B	HT/B	PIN OD
VTK-01001	10	0.024	10	1	12	8	2	47	.31	.16	.14	.29	.014
VTK-02001	20	0.030	18	1	9	13	2	36	.38	.18	.16	.36	.016
VTK-05001	50	0.054	42	1	10	31	2	39	.48	.21	.19	.46	.016
VTK-10001	100	0.102	82	1	12	57	2	46	.59	.25	.23	.57	.016
VTK-15001	150	0.091	127	1	6	96	2	24	.76	.32	.30	.74	.020
VTK-25001	250	0.171	210	1	9	154	2	33	.92	.32	.30	.90	.018
VTK-01002	10	0.008	9	2	6	7	4	23	.51	.24	.21	.48	.025
VTK-02002	20	0.012	17	2	5	12	4	20	.63	.28	.25	.59	.032
VTK-05002	50	0.032	37	2	17	22	4	66	.60	.26	.24	.58	.0225
VTK-10002	100	0.043	79	2	9	53	4	33	.95	.34	.31	.92	.0285
VTK-15002	150	0.053	117	2	8	80	4	30	1.06	.40	.36	1.03	.0285
VTK-25002	250	0.053	205	2	5	150	4	21	1.24	.56	.52	1.20	.032
VTK-01005	10	0.005	9	5	6	7	10	22	1.00	.39	.33	.94	.051
VTK-02005	20	0.006	16	5	6	12	10	22	1.11	.45	.39	1.05	.051
VTK-05005	50	0.010	36	5	9	20	10	36	1.11	.45	.39	1.05	.051
VTK-10005	100	0.021	80	5	8	57	10	33	1.67	.57	.51	1.61	.051
VTK-15005	150	0.026	124	5	8	90	10	30	1.85	.75	.69	1.79	.050
VTK-20005	200	0.030	154	5	9	108	10	35	1.85	.75	.69	1.79	.051
VTK-30005	312	0.037	258	5	11	194	10	32	2.18	1.00	.84	2.10	.051
VTK-02007	20	0.004	18	7	5	13	14	19	1.32	.63	.56	1.24	.064
VTK-05007	50	0.010	41	7	8	29	14	29	1.70	.60	.53	1.63	.064
VTK-10007	100	0.013	78	7	8	54	14	30	1.88	.78	.70	1.80	.064
VTK-15007	150	0.020	128	7	7	96	14	28	2.18	.95	.86	2.10	.064
VTK-20007	200	0.025	168	7	8	120	14	32	2.18	.95	.86	2.10	.064
VTK-05010	50	0.006	40	10	7	33	16	18	1.91	.81	.72	1.82	.064
VTK-25010	250	0.027	167	10	26	122	16	50	2.19	1.10	.85	2.10	.057
VTK-07012	70	0.009	60	12	14	55	16	20	2.21	.98	.88	2.12	.080
VTK-01025	12	0.0023	9.4	25	26	8.7	30	32	2.25	.95	.75	1.85	.100

SENDUST TOROIDAL POWER INDUCTORS

FEATURES

- 1 Sendust Powdered Iron Toroidal Construction
- 2 Optimized For Use as High Frequency DC Chokes
- 3 Temp Rise Data: Ripple Currents $\leq 10\%$ @ 100KHz
- 4 Low Cost Self Lead Construction
- 6 Lower AC Losses Than Powdered Iron

NOTES: Temp Rise T1 & T2 are Calculated

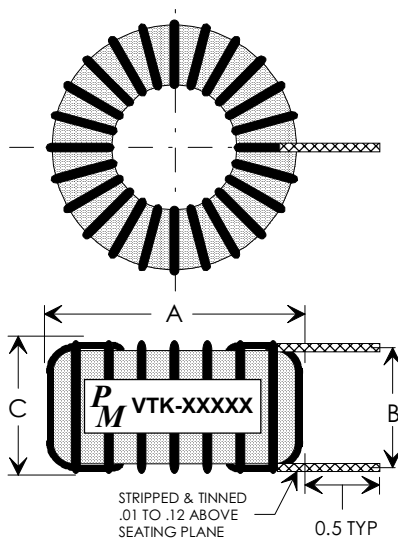
- 1) L_n = Nominal Ind. @ 0.0Adc
 L_1 = Nominal Ind. @ I1 Adc, T1 Temp Rise
 L_2 = Nominal Ind. @ I2 Adc, T2 Temp Rise
- 2) I1 Represents a 1-20% Drop in L_n
I2 Represents a 20-40% Drop in L_n

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

PART NUMBER	Ln (μH)	Rate IDC	DCR (Ohm)	L1 (μH)	I1 @ (dc A)	T1 (°C)	L2 (μH)	I2 @ (dc A)	T2 (°C)	REF. DIMENSIONS IN INCHES				
										A	C	VT/B	HT/B	PIN OD
VTK-00001	10	7.37	0.010	9.0	1.7	15	8.0	3.3	40	.31	.16	.14	.29	.036
VTK-00002	25	5.20	0.020	22.5	1.00	15	20.0	1.9	40	.38	.18	.16	.36	.032
VTK-00003	50	3.95	0.035	45.0	0.70	15	40.0	1.3	40	.48	.21	.19	.46	.028
VTK-00004	75	3.50	0.045	67.5	0.60	15	60.0	1.1	40	.59	.25	.23	.57	.025
VTK-00005	100	3.15	0.055	90.0	0.50	15	80.0	0.95	40	.76	.32	.30	.74	.025
VTK-00006	150	2.35	0.100	135.0	0.40	15	120.0	0.75	35	.92	.32	.30	.90	.020
VTK-00007	200	1.98	0.140	180.0	0.35	15	160.0	0.65	35	.51	.24	.21	.48	.018
VTK-00008	250	1.85	0.160	225.0	0.30	15	200	0.60	35	.63	.28	.25	.59	.018
VTK-00009	330	1.70	0.190	297.0	0.27	15	264	0.50	35	.60	.26	.24	.58	.018

VTK-XXXX MECHANICAL

VTK-XXXXX OUTLINE VERTICAL MOUNT

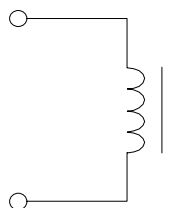


FOR INTERMEDIATE VALUES OR
CUSTOM DESIGNS CONSULT THE
FACTORY.

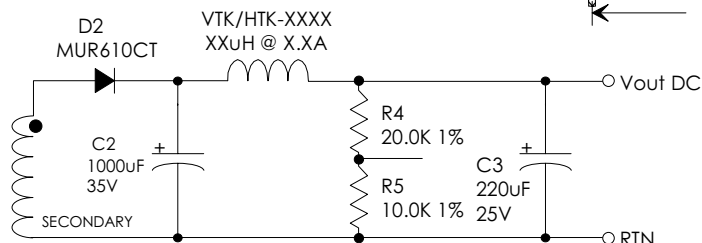
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HORIZONTAL OR VERTICAL MOUNT:

Table Part Numbers are Vertical Mount.
Change the "V" to "H" for Horizontal Mount.
Example:
VTK-05001 = Vertical Mount 50uH, 1.0Adc
HTK-05001 = Horizontal Mount 50uH, 1.0Adc

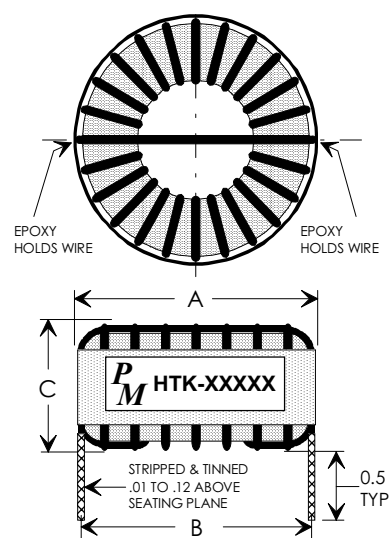


APPLICATION



HTK-XXXX MECHANICAL

HTK-XXXXX OUTLINE HORIZONTAL MOUNT



OFF-LINE SWITCH MODE TRANSFORMERS

Indicated Parts are UL1950 & CSA-950 Recognized Under UL File# E162344

- ① Designed for use with Power Integrations IC's
- ② Designed to meet UL1950/IEC950 Safety Standards
- ③ Design Engineering Support Available
- ④ Multiple Configurations

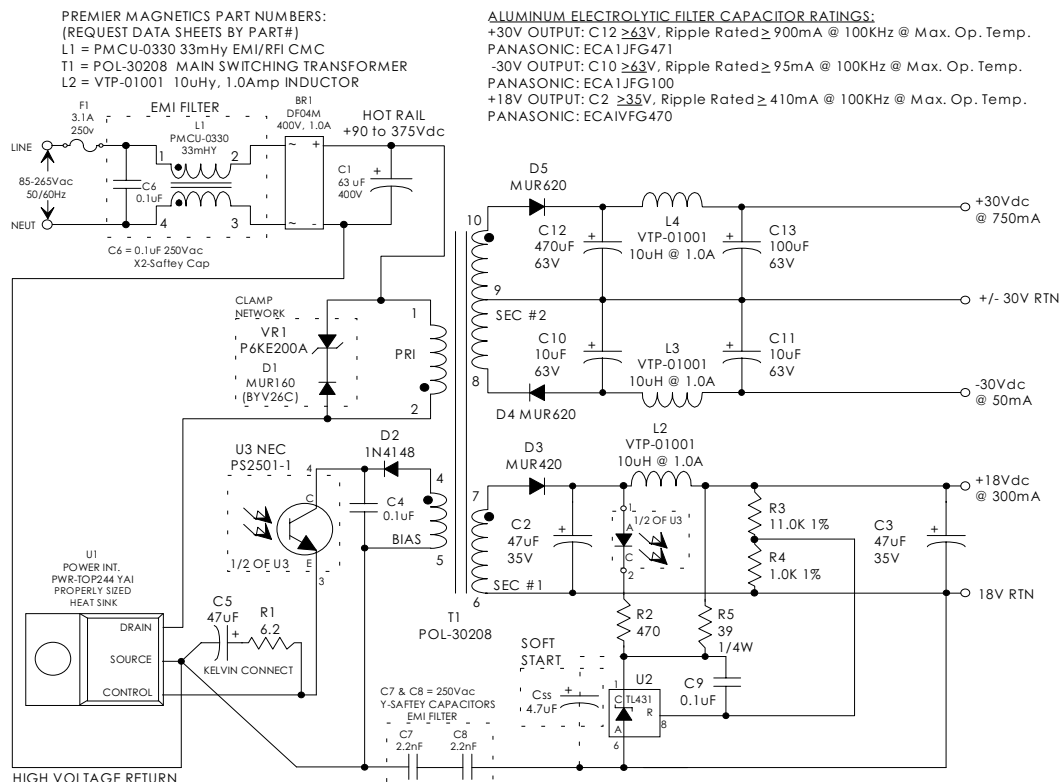
GENERAL APPLICATION INFORMATION

Premier Magnetics' Off-Line Switch Mode Transformers have been designed for use with Power Integrations, Inc. TOPXXX series of three to six terminal off-line PWM switching regulators in the Flyback Buck-Boost circuit configuration. This conversion topology can provide isolated multiple outputs with efficiencies upto 95%. Premiers' Switching Transformers have been optimized to provide maximum power throughput.

The TOPXXX series from Power Integrations, Inc. are self contained 100KHz & 132KHz voltage controlled PWM switching regulators. This series contains all necessary functions for an off-line switched mode control DC power source. These switching regulators provide a very simple solution to off-line designs. The inductors and transformer used with the PWR-TOPXXX are critical to the performance of the circuit. They define the overall efficiency, output power and overall physical size.

Below is a universal input high precision 18V @ 0.300 Amps, 30V @ 0.750 Amps, & -30V @ 0.050Amps (30watt) application circuit utilizing Power Integrations PWR-TOP244Y switching regulator in the flyback buck-boost configuration. The component values listed are intended for reference purposes only. The soft start capacitor C_{ss} is optional depending on the specific application. Simpler topology is possible depending on the line/load regulation required.

SCHEMATIC



OFF-LINE SWITCH MODE TRANSFORMERS

GENERAL ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

Units are Designed for a Universal AC Input of 85 to 265Vac, 47/440 Hz, Unless Otherwise designated

- 1 = Unit Designed for Voltage Doubler input -or- PFC Corrected Front End
- 2 = Unit Designed for AC Input of 85 to 135Vac, 47/440Hz
- 3 = Minimum Parts Count Design (lowest cost). Designed for Relatively Constant Load Power Applications Where Load Regulation of 5.0 % & Line Regulation of 3.0 % is Acceptable
- 4 = Faraday Shield Between Primary + Bias & Secondaries. Connected to Bias - Pin

PART NUMBER	Recommended Power Intgr. Controller	APPLICATION DATA			Recommended		Package Schematic
		Output Voltages Vout Vdc	Output Currents Io_cont Amps	Con Watt	Output Filter Inductor (L2)	Input Filter CMC (L1)	
TSD-1684	TOP 232	2.5/3.3/12	0.5/0.6/0.16	5.2	VTP-01001	PMCU-0330	EE16
TSD-1715	TOP 242	3.3	0.6	2.0	VTP-01001	PMCU-0220	EE16
TSD-1848	TOP 242	3.3/5	1.5/0.7	8.5	VTP-01001	PMCU-0330	EE16
TSD-1813	TOP 233	3.3/5/5	1.5/1.5/0.3	14.0	VTP-01001	PMCU-0330	EEL19
TSD-1687	TOP 243	5.0	2.5	12.5	VTP-01002	PMCU-0330	E22/19
POL-05006 ³	TOP 210	5.0	0.60	3.0	VTP-01001	PMCU-0220	E16-Horz
TSD-816	TOP 210	5.0	0.60	3.0	VTP-01001	PMCU-0220	E16-Horz
TSD-1185	TOP 221	5.0	0.70	3.5	VTP-00301	PMCU-0220	E16-Vert
POL-05010 ³	TOP 200	5.0	1.00	5.0	VTP-01001	PMCU-0220	E16-Horz
POL-05012	TOP 200	5.0	1.20	6.0	VTP-01001	PMCU-0330	E16-Horz
TSD-1812	TOP 242	5.0	1.60	8.0	VTP01001	PMCU-0220	EE16
POL-05020	TOP 223	5.0	2.00	10.0	VTP-01002	PMCU-0330	E16-Vert
POL-05030	TOP 202	5.0	3.00	15.0	VTP-01002	PMCU-0330	E22/19/6
TSD-1486	TOP 200	5.0	1.00	5.0	VTP-01001	PMCU-0220	EE16/EI16
TSD-1952	TOP 202	5 x 2	1.2/1.2	12.0	VTP-01001	PMCU-0220	EPC19
TSD-778	TOP 201	5.0 x 2	1.20/0.80	6.4	VTP-01001	PMCU-0330	E22,10pin
TSD-1853	TOP 246	5.0 x 4	.150-7.0	140.0	VTP-01005	PMCE-0330	ER35
TSD-1962	TOP 242	5.0/7.5/7.5	0.4/0.25/0.25	5.8	VTP-01001	PMCU-0220	EE16
TSD-1829	TOP 234	5/7/17.6/17.6/50	1.2/9/3/3/16	31.0	VTP-01002	PMCU-0330	EE30
TSD-937	TOP 204	5/+8/-8	3.0/+1.0	30.0	VTP-01002	PMCE-0330	E28/11
TSD-1201	TOP 225	5/+9/-9	6/+1.3/-0.13	43.0	VTP-01005	PMCU-0330	EI33/29
TSD-1160	TOP 225	5/+12/-12	6/+1.0/-0.10	43.0	VTP-01005	PMCU-0330	EI33/29
TSD-1695	TOP 248	5/5/12/12	3/2/2/2	49.0	VTP-01001	PMCE-0330	EE33
TSD-1390	TOP 226	5/12	5.0/3.0	61.0	VTP-01005	PMCE-0330	EI33/29
TSD-877	TOP 204	5x2 & 15	2.5/0.10	16.0	VTP-01002	PMCU-0330	E28/11
TSD-1017	TOP 209	5/15	0.02/0.10	1.7	N/A	PMCU-0220	E16-Vert
TSD-1135	TOP 209	5/15	0.05/0.12	2.1	N/A	PMCU-0220	E22/19/6
TSD-1305 ⁴	TOP 209	5/15	0.05/0.12	2.1	N/A	PMCU-0220	E22/19/6
TSD-1110	TOP 224	5/+15/-15	2.2/+0.3	20.0	VTP-01002	PMCU-0330	EEL19
TSD-1941	TOP 247	5/7.75/21/21/51	1.4/1/35/35/19	39.2	VTP-01002	PMCU-0330	EI30
TSD-1866	TOP 247	5/15/30	.75/10/2.5	80.5	VTP-01002	PMCE-0330	EE33
TSD-1869	TOP 248	5/33	3.0/3.0	115.0	VTP-01002	PMCU-0330	EFD25
TSD-893	TOP 201	5/30/+12/-12	1.0/.05/.25/.25	14.0	VTP-01001	PMCU-0330	E30
TSD-876	TOP 210	5/12	0.10/0.20	3.0	Bead	PMCU-0220	E19-Horz
TSD-815 ¹	TOP 201	5/15	1.0/1.0	20.0	VTP-01001	PMCU-0330	E22/19/6
TSD-1961	TOP 248	5/15/24	1/1/4	116.0	VTP-01002	PMCE-0330	EERL35
TSD-1820	TOP 234	5/18	2/0.5	19.0	VTP-01001	PMCU-0330	E20/10/6

OFF-LINE SWITCH MODE TRANSFORMERS

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PART NUMBER	Recommended Power Intrgr. Controller	APPLICATION DATA			Recommended		Package Schematic
		Output Voltages Vout Vdc	Output Currents Io_cont Amps	Con Watt	Output Filter Inductor (L2)	Input Filter CMC (L1)	
TSD-1694	TOP 234	5/20/20	1.3/.260/.260	17.0	VTP-01001	PMCU-0330	EEL19
TSD-1753	TOP 243	5/24	0.50/0.150	6.1	VTP-01001	PMCU-0220	EE19
TSD-858	TOP 210	5/24	0.30/0.08	3.4	VTP-01001	PMCU-0220	E19-Horz
TSD-1696	TOP 248	5/24/48	0.8/0.15/0.02	8.6	VTP-01001	PMCU-0330	E128
TSD-779	TOP 202	5/33	1.0/0.50	21.5	VTP-01001	PMCU-0100	E22/19/6
TSD-988	TOP 214	5/28	1.0/0.50	21.0	VTP-01001	PMCU-0100	EEL22
TSD-983	TOP 202	5/33	1.0/0.50	21.5	VTP-01001	PMCU-0100	E22/19/6
TSD-1422	TOP 223Y	5/-65	1.0/0.1	11.5	VTP-01001	PMCU-0330	EFD30
TSD-979	TOP 210	5.5/10	0.80/0.05	5.0	VTP-01001	PMCU-0220	E16-Horz
TSD-1046 ³	TOP 221	6/25	0.30/0.09	3.9	VTP-00301	PMCU-0220	E22/19/6
TSD-1370	TOP 222	6/24	0.55/0.10	5.0	VTP-01001	PMCU-0220	E2425
TSD-1144 ¹	TOP 223	6/ -38/ -60	1.2/0.30/.050	20.0	VTP-01001	PMCE-0330	E2425
TSD-940	TOP 210	6.5	0.80	5.2	VTP-01001	PMCU-0220	E16-Horz
TSD-860	TOP 224	6.9/2x15	0.30/0.60	20.0	VTP-01001	PMCU-0330	E28/11
TSD-1347	TOP 224	6.9/24/-15	0.3/0.6/0.2	20.0	VTP-01001	PMCU-0330	E28/11
POL-07050	TOP 226	7.0	5.00	35.0	VTP-01005	PMCE-0330	E28/11
POL-07003	TOP 209P	7.5	0.26	2.0	VTP-01002	PMCU-0330	E16-Vert
TSD-1093 ⁴	TOP 209P	7.5	0.26	2.0	VTP-01002	PMCU-0330	E16-Vert
POL-07020	TOP 202	7.5	2.00	15.0	VTP-01002	PMCU-0330	E22/19/6
TSD-1024	TOP 223P	7.5/15	1.0/0.25	11.3	VTP-01002	PMCU-0330	E22/19/6
TSD-1751	TOP 249	7.5/15	1.0/8	128.0	VTP-02007	PMCE-0330	EER35
TSD-1759	TOP 243	7.5/24/24	.27/.20/.04	7.8	VTP-01001	PMCU-0220	EE16
TSD-1195	TOP224	8/16/16	2.0/0.25/0.25	30.0	VTP-01001	PMCE-0330	E30
TSD-1740	TOP 248	8/13/18/18	1.5/3x1.25	73.3	VTP-01001	PMCE-0330	EER35
TSD-794 ¹	TOP 202	8.5	4.00	34.0	VTP-01005	PMCU-2220	E28/11
TSD-1691	TOP 243	8.6	1.8	15.5	VTP-01002	PMCU-0330	E22/19
TSD-1489	TOP 221Y	9.0	0.40	3.6	VTP-0100	PMCU-0220	EE16/EI16
TSD-880	TOP 204	9/24	3.0/0.60	50.0	VTP-01002	PMCE-0330	E30
POL-97505	TOP 221	9.75	0.50	4.9	VTP-01001	PMCU-0330	E16-Vert
TSD-813 ²	TOP 200	9.75	0.50	4.9	Bead	PMCU-0220	E19-Horz
POL-97506	TOP 221	9.75	0.60	5.8	Bead	PMCU-0220	E19-Horz
TSD-825 ³	TOP 221P	12.0	0.30	3.6	VTP-01001	PMCU-0220	E16-Horz
TSD-935 ³	TOP 200	12.0	0.50	5.0	VTP-01001	PMCU-0220	E19-Horz
TSD-990 ³	TOP 222P	12.0	0.67	8.0	VTP-01001	PMCU-0220	E19-Horz
POL-12012	TOP 202	12.0	1.20	15.0	VTP-01001	PMCU-0330	E22/19/6
POL-12017	TOP 224P	12.0	1.70	20.4	VTP-01002	PMCU-0220	E25-Vert
POL-15020	TOP 226	12.0	2.50	30.0	VTP-01002	PMCU-0330	E28/11

OFF-LINE SWITCH MODE TRANSFORMERS

GENERAL ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

Units are Designed for a Universal AC Input of 85 to 265Vac, 47/440 Hz, Unless Otherwise designated

- 1 = Unit Designed for Voltage Doubler input -or- PFC Corrected Front End
- 2 = Unit Designed for AC Input of 85 to 135Vac, 47/440Hz
- 3 = Minimum Parts Count Design (lowest cost). Designed for Relatively Constant Load Power Applications Where Load Regulation of 5.0 % & Line Regulation of 3.0 % is Acceptable
- 4 = Faraday Shield Between Primary + Bias & Secondaries. Connected to Bias - Pin

PART NUMBER	Recommended Power Intgr. Controller	APPLICATION DATA			Recommended		Package Schematic
		Output Voltages Vout Vdc	Output Currents Io_cont Amps	Con Watt	Output Filter Inductor (L2)	Input Filter CMC (L1)	
POL-15033	TOP 226	12.0	3.00	36.0	VTP-01002	PMCE-0330	E30
TSD-762 ²	TOP 103	12.0	3.40	41.0	VTP-01002	PMCE-0330	E28/11
TSD-1834	TOP 247	12	3.75	45.0	VTP-01005	PMCE-0330	E119
TSD-777 ²	TOP 104	12.0	5.00	60.0	VTP-01005	PMCE-0330	E30
TSD-1405	TOP 224P	12.0	1.70	20.4	VTP-01002	PMCU-0220	E25.4
POL-12208	TOP 223	12x2	0.50/0.30	9.6	VTP-01001	PMCU-0330	E22/19/
POL-12216	TOP 224	12x2	0.80/0.80	21.5	VTP-01001	PMCU-0330	E125-Vert
TSD-1943	TOP 248	12x2	2.5/2.5	62.5	VTP-01002	PMCE-0330	E30
TSD-1551	TOP 222Y	12/5/3.3/-12	0.1/0.2/1.5/0.1	8.4	VTP-01001	PMCU-0330	EE22/19/6
TSD-1654	TOP 223Y	12/12	0.30/0.50	9.6	VTP-01001	PMCU-0330	EE19/EI19
TSD-1469	TOP 222Y	13/6/3.3/-13	0.1/0.2/1.5/0.1	8.8	VTP-01001	PMCU-0330	EE22/19/6
POL-15033 ²	TOP 104	13.8	4.00	56.0	VTP-01002	PMCE-0330	E30
TSD-946 ³	TOP 210	14.0	0.20	3.0	VTP-01001	PMCU-0330	E16-Horz
TSD-1010	TOP 210	14.0	0.43	4.5	VTP-01001	PMCU-0330	EFD20
TSD-1003 ³	TOP 210	15.0	0.20	3.0	VTP-01001	PMCU-0330	E16-Horz
TSD-1330 ³	TOP 210	15.0	0.20	3.0	VTP-01001	PMCU-0330	E16-Vert
TSD-1811	TOP 243	15.0	1.0	15.0	VTP-01001	PMCU-0220	EE16
TSD-737 ³	TOP 223	15.0	1.00	15.0	VTP-01001	PMCU-0330	E22/19/6
POL-15020	TOP 226	15.0	2.00	30.0	VTP-01002	PMCU-0330	E28/11
POL-15033	TOP 226	15.0	3.33	50.0	VTP-01002	PMCE-0330	E30
TSD-812	TOP 204	15.0	3.33	50.0	VTP-01002	PMCE-0330	EER28L
POL-15073 ¹	TOP 204	15.0	7.33	110.0	VTP-02007	PMCE-3330	EER28L
POL-15204 ³	TOP 200	15x2	0.20/0.20	6.0	VTP-01001	PMCU-0220	E19-Horz
TSD-1683	TOP 221	15.0/15.0	0.20/0.18	6.3	VTP-01001	PMCU-0220	EE22
TSD-860	TOP 202	+15/6.9	+0.60/0.30	20.0	VTP-01001	PMCU-0330	E28/11
TSD-1432	TOP 224Y	15/-15/6.9	0.8/0.8/0.3	26.1	VTP-01001	PMCU-0330	EER28L
TSD-1385	TOP 204	15/15/5	0.2/0.2/1.0	11.0	VTP-01002	PMCU-0330	E28/11
TSD-873 ¹	TOP 210	17.0	0.10	1.7	Bead	N/A	EP10-SMD
TSD-1035	TOP 221	17.0	0.20	3.5	Bead	N/A	EP10-SMD
TSD-1197	TOP 227	17/21/17	2.0/0.25/0.25	90.0	VTP-01002	PMCE-0330	E133/29
TSD-1055 ³	TOP 210	15V to 18V	.300 to .350	5.5	VTP-01001	PMCU-0220	EEL16
TSD-1439	TOP 221Y	18.0	0.2	3.6	VTP-01001	PMCU-0220	EE16/EI16
TSD-968 ³	TOP 202	18x2	0.40/0.40	14.4	VTP-01001	PMCU-0330	E22/19/6
POL-30208	TOP 244	18/+30/-30	0.30/0.75/0.5	30.0	VTP-01001	PMCU-0330	EE28/11
TSD-1668	TOP 232	18.0	0.40	7.2	VTP-01001	PMCU-0220	EEL16
TSD-1752	TOP 232	19.0	0.45	8.6	VTP-01001	PMCU-0220	EEL19
POL-22007	TOP 202	22.0	0.70	15.4	VTP-01001	PMCU-0330	E22/19/6
TSD-924 ⁴	TOP 202	22.0	0.70	15.4	VTP-01001	PMCU-0330	E22/19/6

OFF-LINE SWITCH MODE TRANSFORMERS

GENERAL ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

Units are Designed for a Universal AC Input of 85 to 265Vac, 47/440 Hz, Unless Otherwise designated

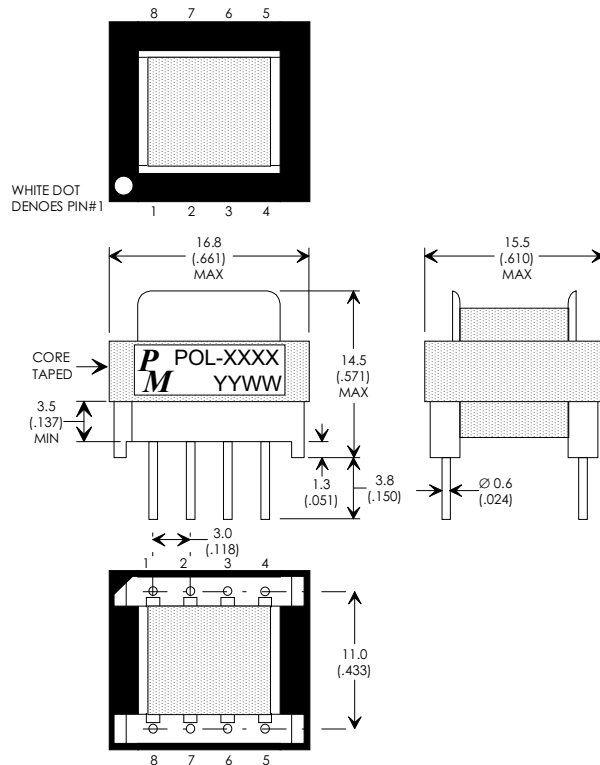
- 1 = Unit Designed for Voltage Doubler input -or- PFC Corrected Front End
- 2 = Unit Designed for AC Input of 85 to 135Vac, 47/440Hz
- 3 = Minimum Parts Count Design (lowest cost). Designed for Relatively Constant Load Power Applications Where Load Regulation of 5.0 % & Line Regulation of 3.0 % is Acceptable
- 4 = Faraday Shield Between Primary + Bias & Secondaries. Connected to Bias - Pin

PART NUMBER	Recommended Power Intgr. Controller	APPLICATION DATA			Recommended		Package Schematic
		Output Voltages Vout Vdc	Output Currents Io_cont Amps	Con Watt	Output Filter Inductor (L2)	Input Filter CMC (L1)	
POL-24013	TOP 204	22.0	1.50	33.0	VTP-01002	PMCU-0330	E28/11
POL-24020	TOP 226	22.0	2.00	44.0	VTP-01002	PMCE-0330	E30
TSD-1936	TOP 243	24.0	0.50	12..	VTP-01001	PMCU-0220	EE16
TSD-1693	TOP 246	24.0	3.5	8.4	VTP-01005	PMCU-0330	EI30
TSD-790	TOP 200	24.0	0.15	3.6	VTP-01001	PMCU-0220	E22/19/6
TSD-1801	TOP 243	24.0	0.20	4.8	VTP-01001	PMCU-0220	EE16
TSD-1791	TOP 234	24.0	1.25	30.0	VTP-01001	PMCU-0330	EF25
POL-24013	TOP 226	24.0	1.30	31.2	VTP-01002	PMCU-0330	E28/11
TSD-1043 ⁴	TOP 204	24.0	1.30	31.2	VTP-01002	PMCU-0330	E28/11
TSD-975	TO P214	24.0	1.30	31.2	VTP-01001	PMCU-0330	EPC25
POL-24020	TOP 226	24.0	2.00	48.0	VTP-01002	PMCE-0330	E30
POL-24208	TOP 226	24.0x2	0.80x2	38.4	VTP-01001	PMCU-0330	E25-Vert
POL-24219	TOP 227	24.0x2	1.875x2	90.0	VTP-01001	PMCE-0330	EI33/29
TSD-1667	TOP 242	24.0/5.0	0.150/0.400	5.6	VTP-01001	PMCU-0220	EI19
TSD-1395	TOP 224Y	24.0/5.0	1.0/3.0	39.0	VTP-01002	PMCE-0330	EE30
TSD-1406	TOP 223P	24.0/5.0	0.15/0.8	7.6	VTP-01001	PMCU-5330	EE22/19/6
TSD-1476	TOP 202YAI	24.0/5.0	0.5/1.0	17.0	VTP-01001	PMCU-0100	EI22/19/6
TSD-1647	TOP 222	24.0/7.5	0.2/0.265	6.8	VTP-01001	PMCU-0100	EE16/EI16
TSD-1468	TOP 222	-24.0/-60.0	0.3/0.13	15.0	VTP-01001	PMCU-0330	EE19/EI19
POL-28022	TOP 204	28.0	2.20	61.6	VTP-01002	PMCE-0330	E30
TSD-1717	TOP 249	28.0	7.5	210.0	VTP-02007	PMCE-0330	ETD39
POL-30030 ¹	TOP 227Y	28.0	4.00	112.0	VTP-01005	PMCE-0160	EI33/29
TSD-1056 ¹	TOP 227Y	29/9.5	3.50/0.25	104.0	VTP-01003	PMCE-0330	EI40
POL-30030	TOP 227Y	30.0	3.00	90.0	VTP-01002	PMCE-0160	EI33/29
TSD-1737	TOP 247	30.0	4.0	120.0	VTP-01005	PMCE-0330	E42
POL-40020	TOP 227Y	40.0	2.00	80.0	VTP-01002	PMCE-0160	EI33/29
POL-45012	TOP 204	45.0	1.20	54.0	VTP-01002	PMCE-0330	E28/11
TSD-1421	TOP 222Y	48.0	0.25	12.0	VTP-01001	PMCE-0330	EF25
TSD-1739	TOP 246	48.0	2.0	96.0	VTP-01002	PMCE-0330	EI33
TSD-1854	TOP 250	48	4.16	200.0	VTP-01005	PMCE-0330	E42/21
TSD-1686	TOP 246	72.0	0.8	58.0	VTP-01001	PMCE-0330	E28
TSD-1809	TOP 245	72.0	0.5	36.0	VTP-01001	PMCU-0330	EI25
TSD-1552	TOP 227	85/-85/48/24	0.175/0.175/1.3/1.3	123.4	VTP-01002	PMCE-0330	EI33/29/1
TSD-974 ⁵	TOP104	-118	-0.13	15.3	VTP-01002	N/A	EFD25
TSD-1851	TOP 249	360	.180	65.0	VTP-01001	PMCE-0330	EI40

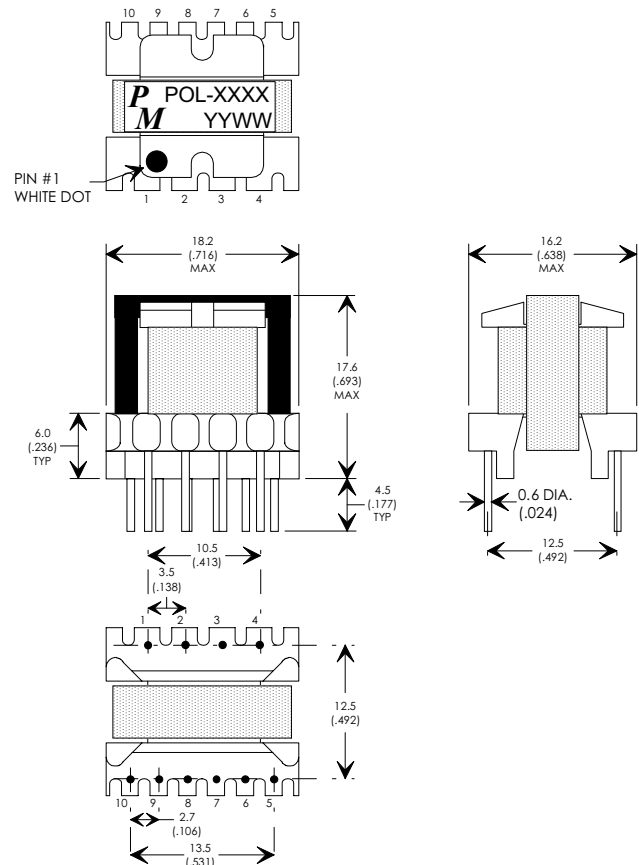
OFF-LINE SWITCH MODE TRANSFORMERS

MECHANICALS

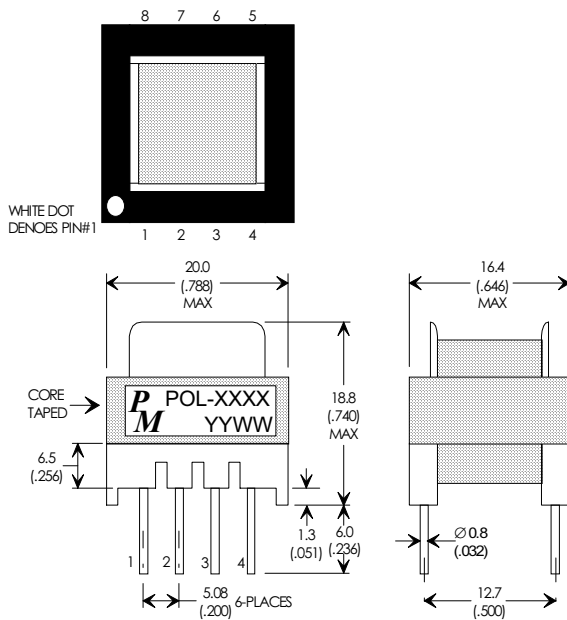
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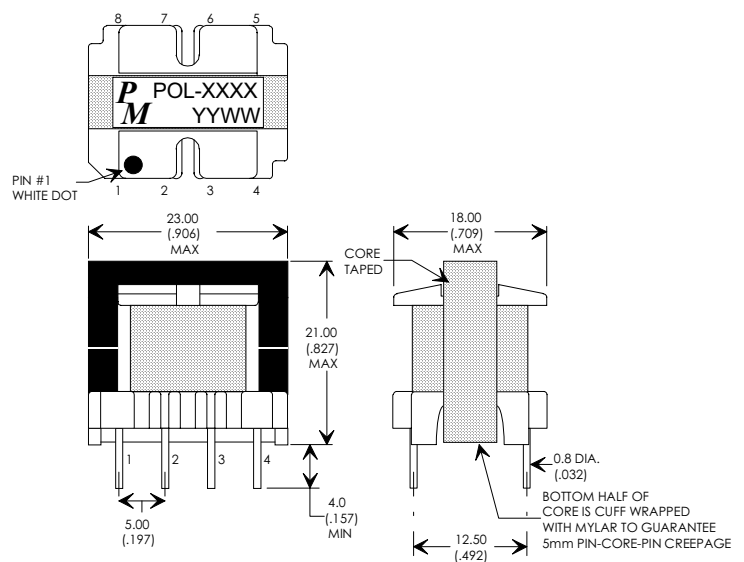
E16-Vert



E19-Horiz



E22/19/6



Specifications subject to change without notice.

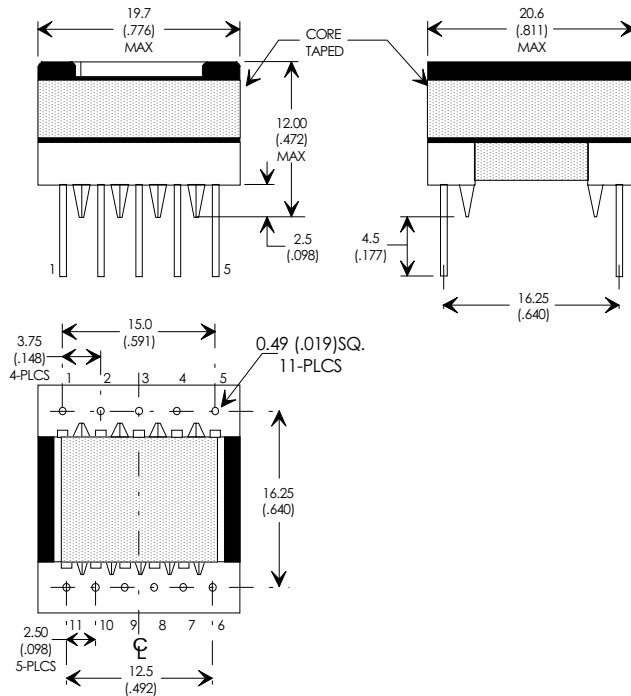
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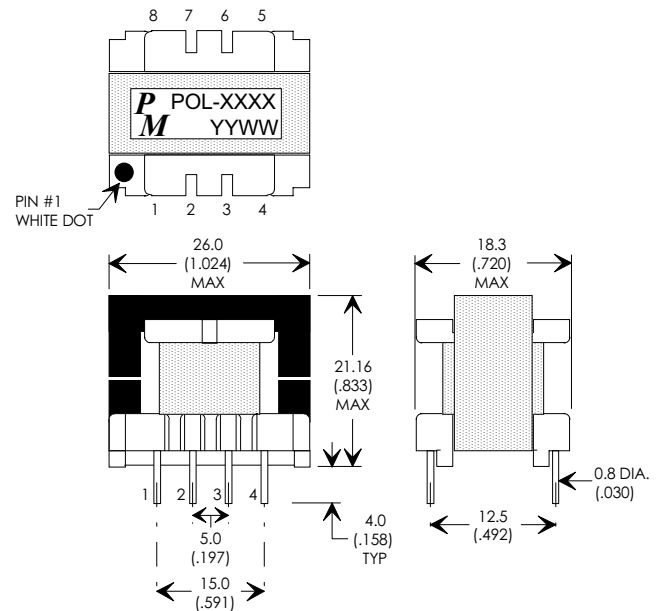
OFF-LINE SWITCH MODE TRANSFORMERS

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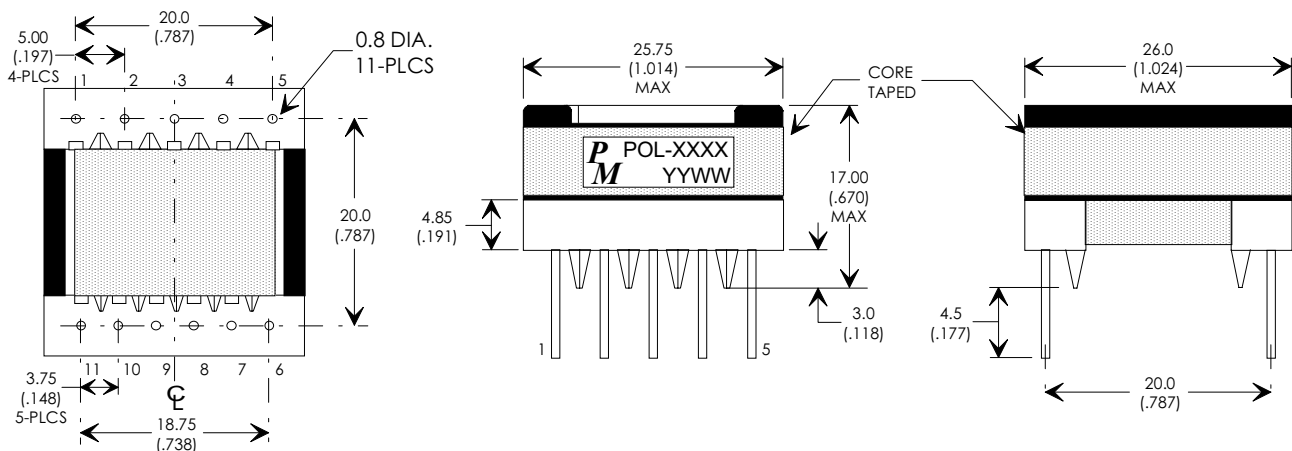
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E-25



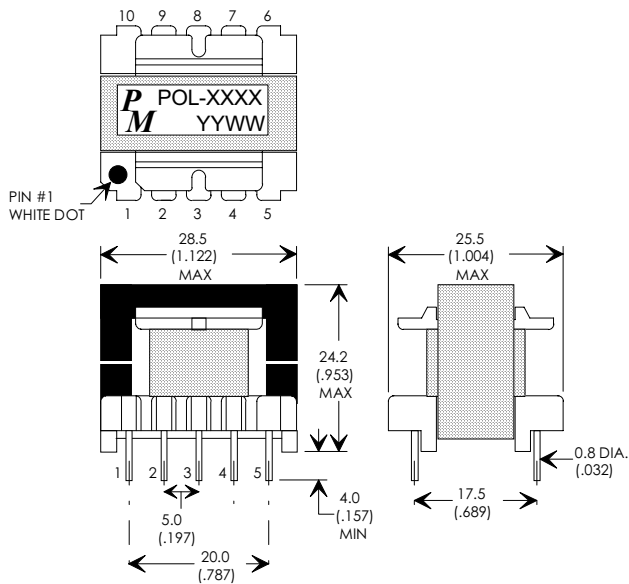
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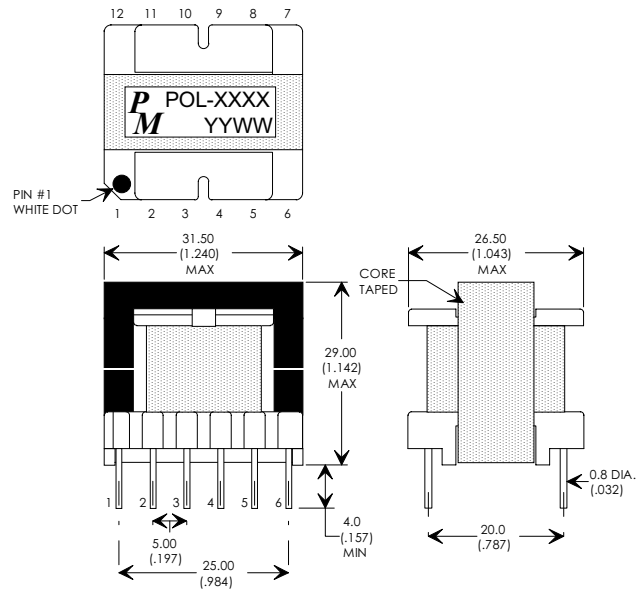
OFF-LINE SWITCH MODE TRANSFORMERS

MECHANICALS

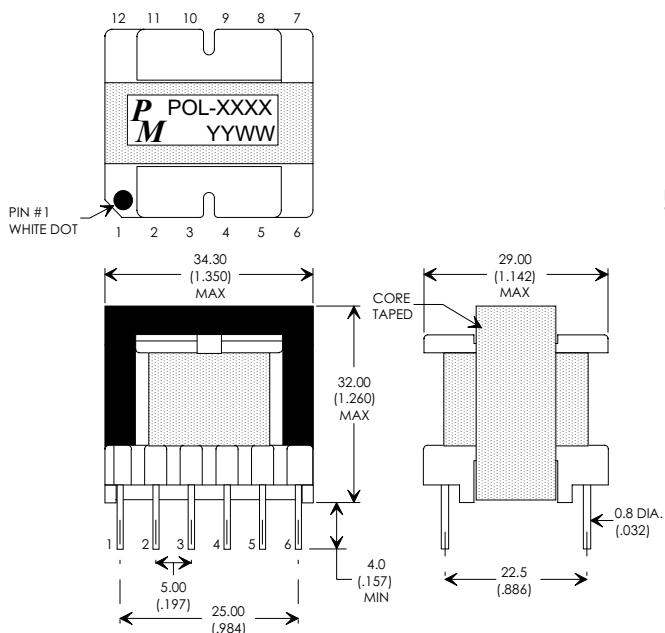
E28/11



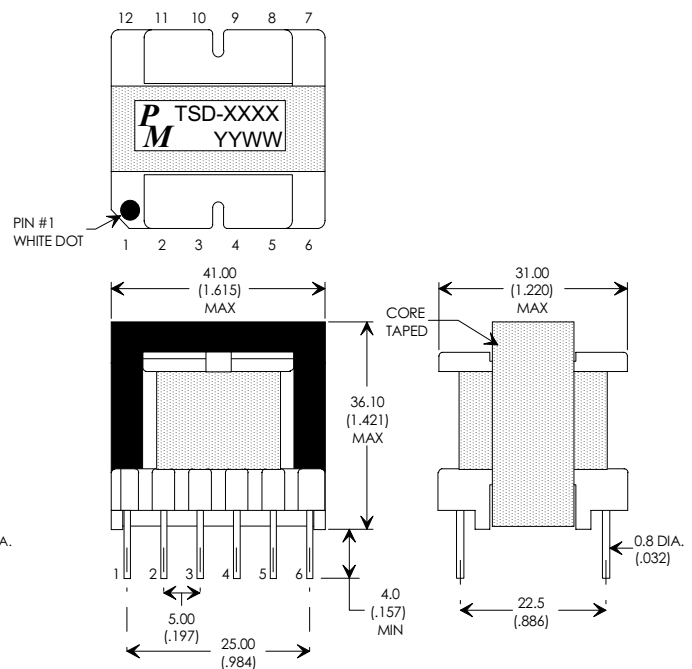
E30



E133/29



E140



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OFF-LINE SWITCH MODE TRANSFORMERS

Indicated Parts are UL1950 & CSA-950 Recognized Under UL File# E162344

UL 1950 & CSA 950-95, C-UL US Recognized Parts

UL & CSA Recognized Components in UL File E162344 (S), Product Designation XNWX2

REF #	PART NUMBER	Package Schematic	REF #	PART NUMBER	Package Schematic	REF #	PART NUMBER	Package Schematic
1	TSD-737	E22/19/6	38	TSD-1110	EEL19			
2	TSD-762	E28/11	39	POL-05006	E-16 HORIZ			
3	TSD-777	E30	40	POL-05010	E-16 HORIZ			
4	TSD-778	E22/19/6	41	POL-05012	E-16 HORIZ			
5	TSD-779	E22/19/6	42	POL-05020	E-16 VERT			
6	TSD-790	E22/19/6	43	POL-05030	E22/19/6			
7	TSD-794	E28/11	44	POL-07003	E-16 VERT			
8	TSD-812	EER28L	45	POL-07020	E22/19/6			
9	TSD-813	E19 HORIZ	46	POL-07050	E28/11			
10	TSD-816	E-16 HORIZ	47	POL-12012	E22/19/6			
11	TSD-825	E-16 HORIZ	48	POL-12017	EI25 VERT			
12	TSD-858	E19 HORIZ	49	POL-12208	E22/19/6			
13	TSD-860	E28/11	50	POL-12216	EI25 VERT			
14	TSD-876	E19 HORIZ	51	POL-15020	E28/11			
15	TSD-877	E28/11	52	POL-15033	E30			
16	TSD-880	E30	53	POL-15073	EER28L			
17	TSD-893	E30	54	POL-15204	E19 HORIZ			
18	TSD-924	E22/19/6	55	POL-22007	E22/19/6			
19	TSD-935	E19 HORIZ	56	POL-24013	E28/11			
20	TSD-937	E28/11	57	POL-24020	E28/11			
21	TSD-940	E-16 HORIZ	58	POL-28022	E30			
22	TSD-946	E-16 HORIZ	59	POL-30030	EI33/29			
23	TSD-968	E22/19/6	60	POL-40020	EI33/29			
24	TSD-974	EFD25	61	POL-45012	E28/11			
25	TSD-975	EPC25	62	POL-97506	E19 HORIZ			
26	TSD-979	E-16 HORIZ						
27	TSD-983	E22/19/6						
28	TSD-988	EEL22						
29	TSD-990	E19 HORIZ						
30	TSD-1003	E-16 HORIZ						
31	TSD-1017	E-16 VERT						
32	TSD-1024	E22/19/6						
33	TSD-1043	E28/11						
34	TSD-1046	E22/19/6						
35	TSD-1055	EEL16						
36	TSD-1056	EI40						
37	TSD-1093	E-16 VERT						

Indicated Parts are UL1950, IEC950, CSA-950 Recognized Under UL File# E162344

- ① Designed for Use with Power Integrations IC's, Tiny Switch Family
- ② Output Voltage Range from 3.5 to 27 Vdc
- ③ 3000 Vrm Isolation (Hi-Pot). Meets UL1950, IEC950 Safety Standard
- ④ Units are Designed for a Universal AC Input of 85 to 265Vac, 47/440 Hz, Unless otherwise Designated

GENERAL ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	Recommended Power Intgr. Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref(V)	Part Number	Manufacturer Made
PNY-05015	TNY-255	3.5	1.8	3.0	1N5225B	Motorola
		3.8	1.7	3.3	1N5226B	Motorola
		4.0	1.6	3.6	1N5227B	Motorola
		4.4	1.5	3.9	1N5228B	Motorola
		4.9	1.4	4.3	1N5229B	Motorola
		5.2	1.3	4.7	1N5230B	Motorola
		5.8	1.2	5.1	1N5231B	Motorola
		6.1	1.2	5.6	1N5232B	Motorola
		6.5	1.1	6.0	1N5233B	Motorola
		6.8	1.1	6.2	1N5234B	Motorola
		7.5	1.0	6.8	1N5235B	Motorola
		8.4	1.0	7.5	1N5236B	Motorola
		9.0	0.9	8.2	1N5237B	Motorola
		9.8	0.8	9.1	1N5239B	Motorola
		11.2	0.5	10.0	1N5240B	Motorola
PNY-05015	TNY-256	3.6	1.7	3.0	1N5225B	Motorola
		3.9	1.8	3.3	1N5226B	Motorola
		4.2	1.3	3.6	1N5227B	Motorola
		4.6	1.45	3.9	1N5228B	Motorola
		5.0	1.57	4.3	1N5229B	Motorola
		5.4	1.3	4.7	1N5230B	Motorola
		5.9	1.14	5.1	1N5231B	Motorola
		6.2	1.20	5.6	1N5232B	Motorola
		6.8	1.1	6.0	1N5233B	Motorola
		7.0	1.13	6.2	1N5234B	Motorola
		7.6	1.06	6.8	1N5235B	Motorola
		8.4	1.04	7.5	1N5236B	Motorola
		9.0	0.9	8.2	1N5237B	Motorola
		9.8	0.81	9.1	1N5239B	Motorola
		11.2	0.5	10.0	1N5240B	Motorola

OFF-LINE SWITCH MODE TINY SWITCH TRANSFORMERS

PART NUMBER	Recommended Power Intgr. Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer Made
PNY-07006	TNY-254	3.1	0.7	3.9	1N5228B	Motorola
		3.5	0.7	4.3	1N5229B	Motorola
		4.2	0.7	4.7	1N5230B	Motorola
		5.8	0.6	5.1	1N5231B	Motorola
		6.2	0.6	5.6	1N5232B	Motorola
		6.6	0.6	6.0	1N5233B	Motorola
		6.9	0.5	6.2	1N5234B	Motorola
		7.5	0.5	6.8	1N5235B	Motorola
		8.3	0.5	7.5	1N5236B	Motorola
		8.9	0.4	8.2	1N5237B	Motorola
		9.7	0.4	8.7	1N5238B	Motorola
		11.0	0.3	10.0	1N5240B	Motorola
		12.0	0.3	11.0	1N5241B	Motorola
		12.5	0.3	12.0	1N5242B	Motorola
		13.1	0.3	13.0	1N5243B	Motorola
		14.1	0.3	14.0	1N5244B	Motorola
		16.0	0.2	15.0	1N5245B	Motorola
		16.7	0.2	16.0	1N5246B	Motorola
PNY-07006	TNY-256	3.08	1.43	3.9	1N5228B	Motorola
		3.50	1.12	4.3	1N5229B	Motorola
		4.60	0.91	4.7	1N5230B	Motorola
		5.60	0.80	5.1	1N5231B	Motorola
		6.12	0.76	5.6	1N5232B	Motorola
		6.58	0.65	6.0	1N5233B	Motorola
		7.04	0.63	6.2	1N5234B	Motorola
		7.35	0.60	6.8	1N5235B	Motorola
		8.34	0.59	7.5	1N5236B	Motorola
		8.98	0.50	8.2	1N5237B	Motorola
		9.62	0.48	8.7	1N5238B	Motorola
		10.90	0.45	10.0	1N5240B	Motorola
		11.88	0.40	11.0	1N5241B	Motorola
		12.57	0.38	12.0	1N5242B	Motorola
		13.26	0.37	13.0	1N5243B	Motorola
		14.10	0.32	14.0	1N5244B	Motorola
		15.70	0.30	15.0	1N5245B	Motorola
		16.93	0.26	16.0	1N5246B	Motorola
PNY-24004	TNY-255	26.9	0.30	24	1N5252B	Motorola
		22.7	0.42	20	1N5250B	Motorola
		21.1	0.46	19	1N5249B	Motorola
		18.4	0.50	17	1N5247B	Motorola
		17.6	0.53	16	1N5246B	Motorola
		16.0	0.55	15	1N5245B	Motorola
		13.7	0.64	13	1N5243B	Motorola
		12.6	0.70	12	1N5242B	Motorola
		12.0	0.72	11	1N5241B	Motorola
		9.9	0.77	9.1	1N5239B	Motorola
		7.5	0.92	6.8	1N5235B	Motorola

Specifications subject to change without notice.

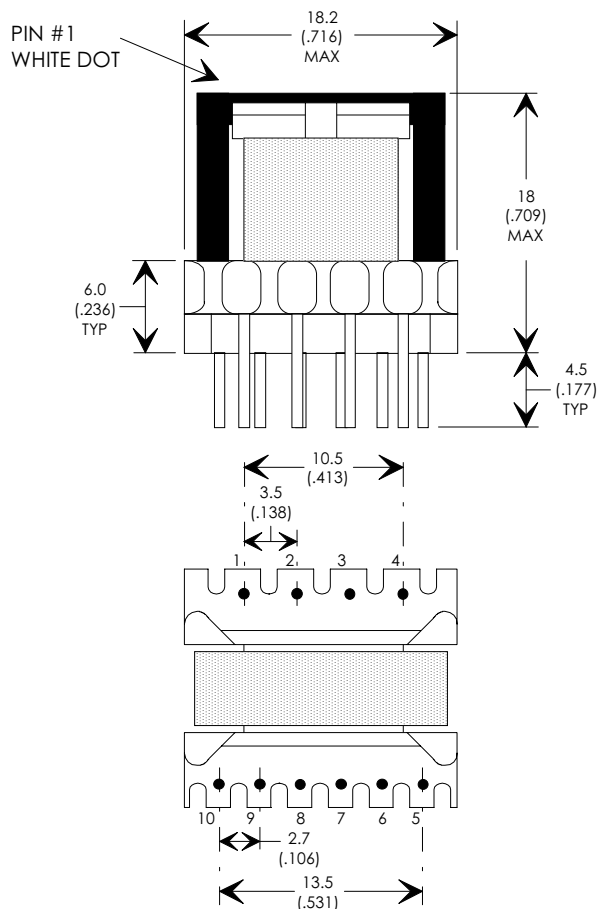
pnv 12/01

20381 BARENTS SEA CIRCLE, LAKE FOREST, CA 92630 • TEL: (949) 452-0511 • FAX: (949) 452-0512 • <http://www.premiermag.com>

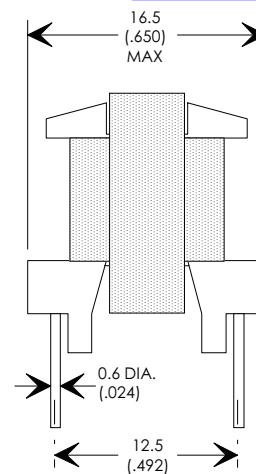
OFF-LINE SWITCH MODE TINY SWITCH TRANSFORMERS

PART NUMBER	Recommended Power Intgr. Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer Made
PNY-24004	TNY-256	27.3	0.30	24	1N5252B	Motorola
		22.2	0.40	20	1N5250B	Motorola
		20.7	0.44	19.1	1N5249B	Motorola
		18.4	0.49	17	1N5247B	Motorola
		17.6	0.52	16	1N5246B	Motorola
		16.5	0.55	15	1N5245B	Motorola
		13.5	0.64	13	1N5243B	Motorola
		12.7	0.71	12	1N5242B	Motorola
		12.1	0.72	11	1N5241B	Motorola
		9.9	0.82	9.1	1N5239B	Motorola
		7.7	0.94	6.8	1N5235B	Motorola
PNY-12206	TNY-256	12/12/5	.06/.06/.60			
PNY-12238	TNY-267	12/12	.380/.380			
PNY-15000	TNY-266	5/15	.050/.500			
PNY-24002	TNY-266	24	.400			
TSD-1460	TNY-254	5	.500			

DIMENSIONS mm (IN)



SCHEMATIC



PMCE-XXXX EMI/RFI COMMON MODE LINE FILTERS

MEDIUM & HI POWER

- ① Rated Voltage: 250Vac, 45/400Hz
- ② $\leq 50^{\circ}\text{C}$ Temp Rise & Rated Current ⁽¹⁾
- ③ Operating Temp -40 to +80 $^{\circ}\text{C}$
- ④ Low Profile Construction
- ⑤ 3750Vrms Isolation
- ⑥ Insulation Resistance @ 500Vdc >100M Ω

ELECTRICAL SPECIFICATIONS AT 25 $^{\circ}\text{C}$ - OPERATING TEMPERATURE RANGE -40 $^{\circ}\text{C}$ TO +80 $^{\circ}\text{C}$

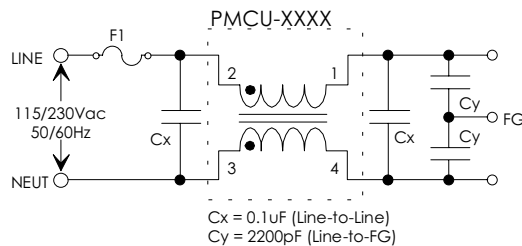
PART NUMBER	RATED RMS Current Amps rms	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		115V	230V			
PMCE-0470	0.75	86.25	172.50	47.0	0.720	E25.4
PMCE-0330	1.00	115.00	230.00	33.0	0.550	E25.4
PMCE-0160	1.50	172.50	345.00	16.0	0.250	E25.4
PMCE-0100	1.75	201.25	402.50	10.0	0.170	E25.4
PMCE-0056	2.25	258.75	517.50	5.6	0.080	E25.4
PMCE-0033	2.75	316.25	632.50	3.3	0.055	E25.4
PMCE-0015	3.50	402.50	805.00	1.5	0.032	E25.4
PMCE-3470	1.75	201.25	402.5	47.0	0.520	E35
PMCE-3330	2.00	230.00	460.00	33.0	0.375	E35
PMCE-3220	2.50	316.25	632.50	22.0	0.250	E35
PMCE-3100	3.50	402.50	805.00	10.0	0.150	E35
PMCE-3056	4.50	517.50	1035.0	5.6	0.090	E35
PMCE-3033	5.50	632.50	1265.0	3.3	0.050	E35
PMCE-3015	7.00	805.00	1610.0	1.5	0.030	E35

Notes:

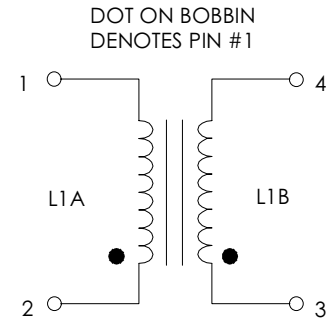
- (1) Temperature Rise is specified at maximum continuous current. Lower currents will result in reduced temperature rise. Design point is $\leq 50^{\circ}\text{C}$ rise at rated current.

APPLICATION

TYPICAL APPLICATION CIRCUIT



SCHEMATIC



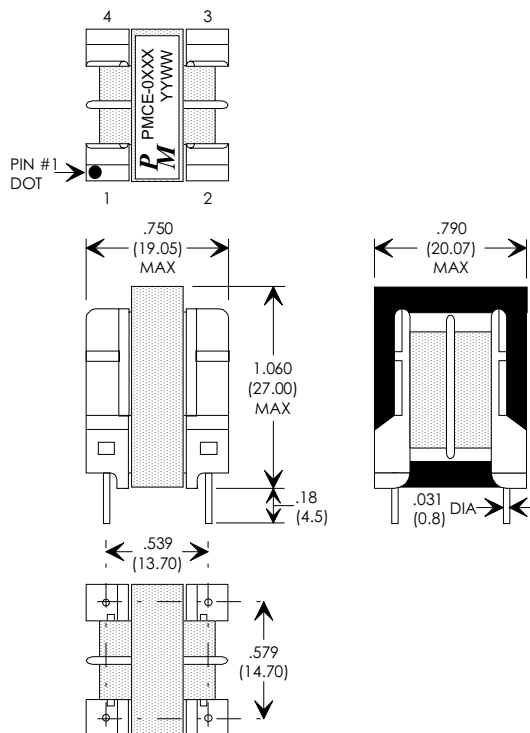
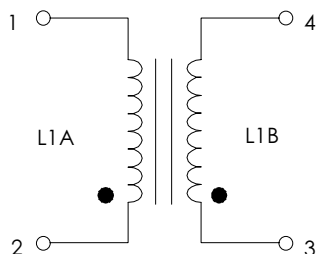
PMCE-XXXX EMI/RFI COMMON MODE LINE FILTERS

PMCE-0XXX E25.4

PMCE-3XXX E35

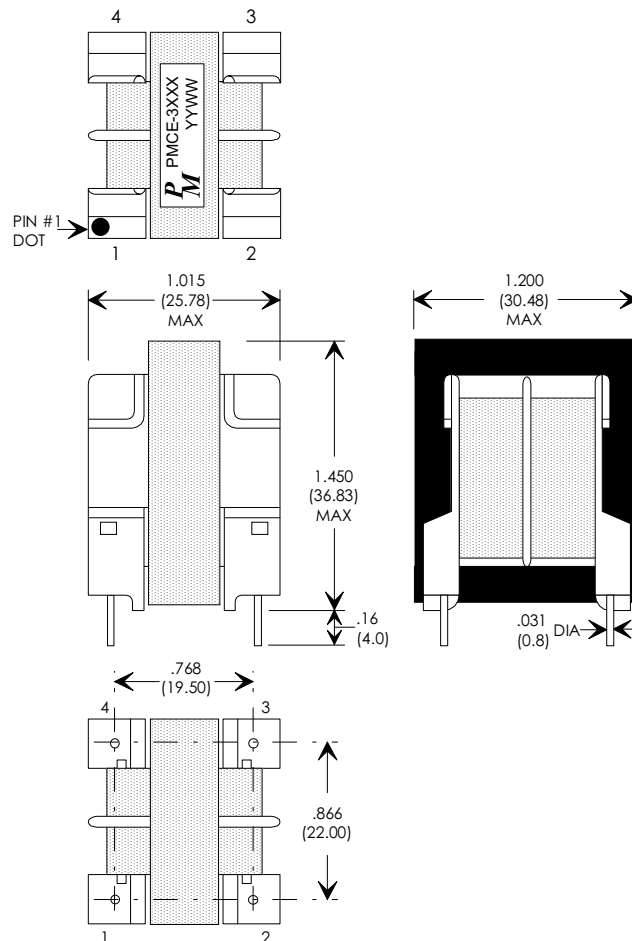
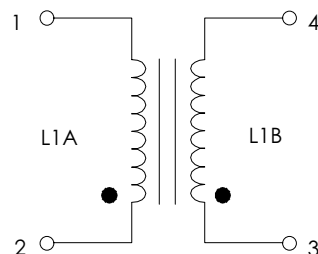
PART IS REVERSIBLE.
IT CAN BE INSERTED INTO PCB EITHER WAY.

DOT ON BOBBIN
DENOTES PIN #1



PART IS REVERSIBLE.
IT CAN BE INSERTED INTO PCB EITHER WAY.

DOT ON BOBBIN
DENOTES PIN #1



Specifications subject to change without notice.

pmce 10/98

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PMCU-XXXX EMI/RFI COMMON MODE LINE FILTERS

LOW PROFILE-HORZ

- ① Rated Voltage: 250Vac, 45/400Hz
- ② $\leq 30^{\circ}\text{C}$ Temp Rise & Rated Current ⁽¹⁾
- ③ Operating Temp -40 to $+80^{\circ}\text{C}$
- ④ Low Profile Horizontal Construction
- ⑤ 3750Vrms Isolation
- ⑥ Insulation Resistance @ 500Vdc $>100\text{M}\Omega$

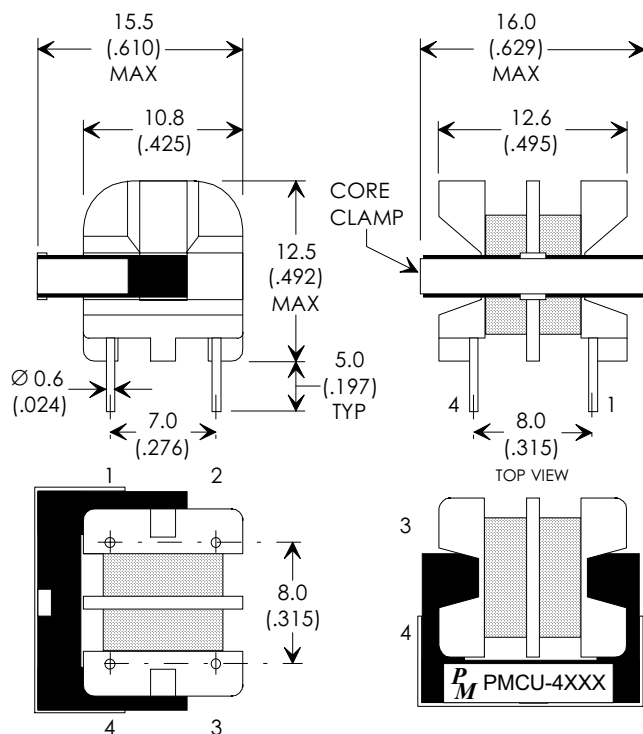
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO $+80^{\circ}\text{C}$

PART NUMBER	RATED RMS Current mA rms	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		115V	230V			
PMCU-4470	150	17.25	34.50	47.0	6.90	U9.8
PMCU-4330	200	23.00	46.00	33.0	5.50	U9.8
PMCU-4220	250	28.75	57.50	22.0	3.70	U9.8
PMCU-4100	350	40.25	80.50	10.0	1.40	U9.8
PMCU-4056	450	51.75	103.50	5.6	0.75	U9.8
PMCU-4033	600	69.00	138.00	3.3	0.50	U9.8
PMCU-4015	800	92.00	184.00	1.5	0.30	U9.8
PMCU-4009	1000	115.00	230.00	0.9	0.16	U9.8
PMCU-4005	1500	172.50	345.00	0.5	0.12	U9.8
PMCU-4002	2000	230.00	460.00	0.2	0.06	U9.8
PMCU-4001	3000	345.00	690.00	0.1	0.03	U9.8

Notes:

- (1) Temperature Rise is specified at maximum continuous current. Lower currents will result in reduced temperature rise. Design point is $\leq 30^{\circ}\text{C}$ rise at rated current.

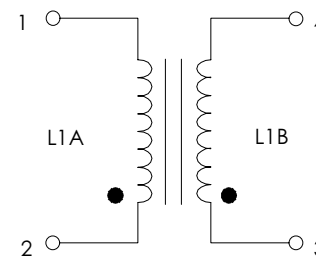
MECHANICAL



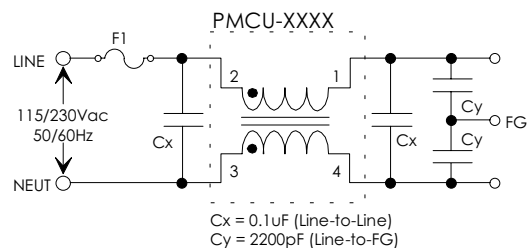
SCHEMATIC

PART IS REVERSIBLE.
IT CAN BE INSERTED INTO PCB EITHER WAY.

DOT ON BOBBIN
DENOTES PIN #1



TYPICAL APPLICATION CIRCUIT



PMCU-XXXX EMI/RFI COMMON MODE LINE FILTERS

LOW PROFILE-VERT

- ① Rated Voltage: 250Vac, 45/400Hz
- ② $\leq 30^{\circ}\text{C}$ Temp Rise & Rated Current ⁽¹⁾
- ③ Operating Temp -40 to $+80^{\circ}\text{C}$
- ④ Low Profile Vertical Construction
- ⑤ 3750Vrms Isolation
- ⑥ Insulation Resistance @ 500Vdc $>100\text{M}\Omega$

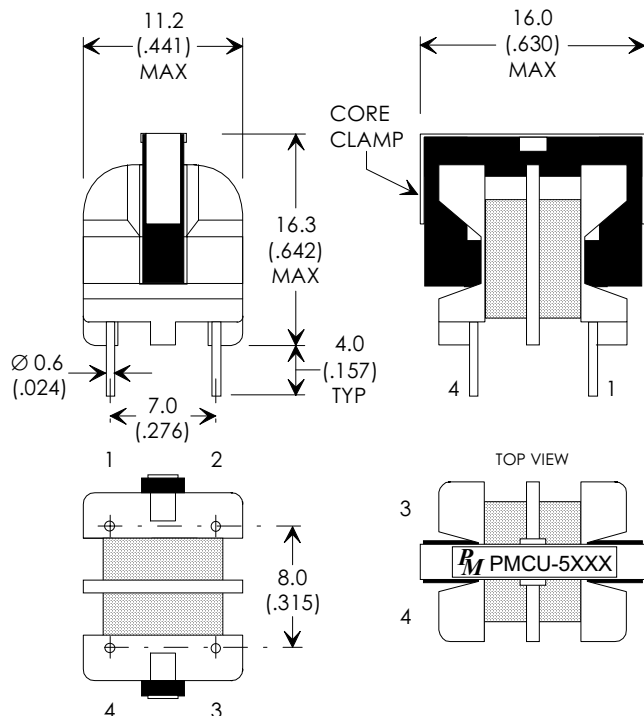
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO $+80^{\circ}\text{C}$

PART NUMBER	RATED RMS Current mA rms	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		115V	230V			
PMCU-5470	150	17.25	34.50	47.0	6.90	U9.8
PMCU-5330	200	23.00	46.00	33.0	4.95	U9.8
PMCU-5220	250	28.75	57.50	22.0	3.70	U9.8
PMCU-5100	350	40.25	80.50	10.0	1.40	U9.8
PMCU-5056	450	51.75	103.50	5.6	0.75	U9.8
PMCU-5033	600	69.00	138.00	3.3	0.50	U9.8
PMCU-5015	800	92.00	184.00	1.5	0.30	U9.8
PMCU-5009	1000	115.00	230.00	0.9	0.16	U9.8
PMCU-5005	1500	172.50	345.00	0.5	0.12	U9.8
PMCU-5002	2000	230.00	460.00	0.2	0.06	U9.8
PMCU-5001	3000	345.00	690.00	0.1	0.03	U9.8

Notes:

- (1) Temperature Rise is specified at maximum continuous current. Lower currents will result in reduced temperature rise. Design point is $\leq 30^{\circ}\text{C}$ rise at rated current.

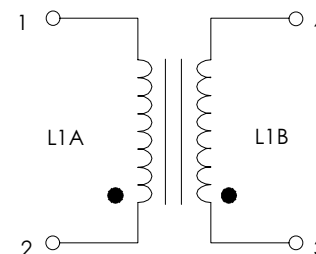
MECHANICAL



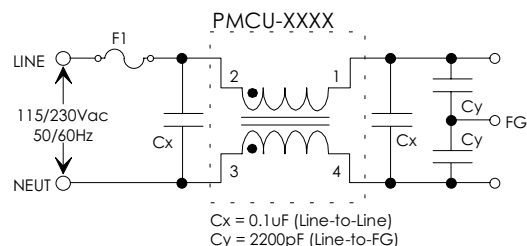
SCHEMATIC

PART IS REVERSIBLE.
IT CAN BE INSERTED INTO PCB EITHER WAY.

DOT ON BOBBIN
DENOTES PIN #1



TYPICAL APPLICATION CIRCUIT



PMCU-XXXX EMI/RFI COMMON MODE LINE FILTERS

MEDIUM POWER

- ① Rated Voltage: 250Vac, 45/400Hz
- ② $\leq 50^{\circ}\text{C}$ Temp Rise & Rated Current ⁽¹⁾
- ③ Operating Temp -40 to +80 °C
- ④ Low Profile Construction
- ⑤ 3750Vrms Isolation
- ⑥ Insulation Resistance @ 500Vdc >100M Ω

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +80°C

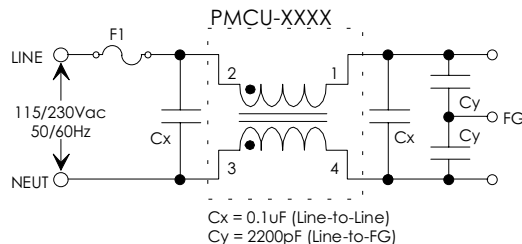
PART NUMBER	RATED RMS Current Amps rms	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		115V	230V			
PMCU-0470	0.35	40.25	80.50	47.0	2.40	U10.5
PMCU-0330	0.40	46.00	92.00	33.0	2.00	U10.5
PMCU-0220	0.50	57.50	115.00	22.0	1.20	U10.5
PMCU-0100	0.65	74.75	149.50	10.0	0.75	U10.5
PMCU-0056	1.00	115.00	230.00	5.6	0.40	U10.5
PMCU-0033	1.20	138.00	276.00	3.3	0.25	U10.5
PMCU-0015	1.80	207.00	414.00	1.5	0.11	U10.5
PMCU-2470	0.50	57.50	115.00	47.0	1.35	U16
PMCU-2330	0.60	69.00	138.00	33.0	1.00	U16
PMCU-2220	0.75	86.25	172.50	22.0	0.60	U16
PMCU-2100	1.00	115.00	230.00	10.0	0.34	U16
PMCU-2056	1.40	161.00	322.00	5.6	0.15	U16
PMCU-2033	2.00	230.00	460.00	3.3	0.10	U16
PMCU-2015	2.70	287.50	575.00	1.5	0.04	U16

Notes:

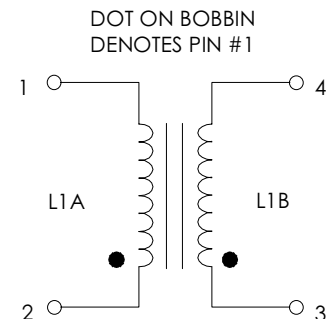
- (1) Temperature Rise is specified at maximum continuous current. Lower currents will result in reduced temperature rise. Design point is $\leq 50^{\circ}\text{C}$ rise at rated current.

APPLICATION

TYPICAL APPLICATION CIRCUIT



SCHEMATIC



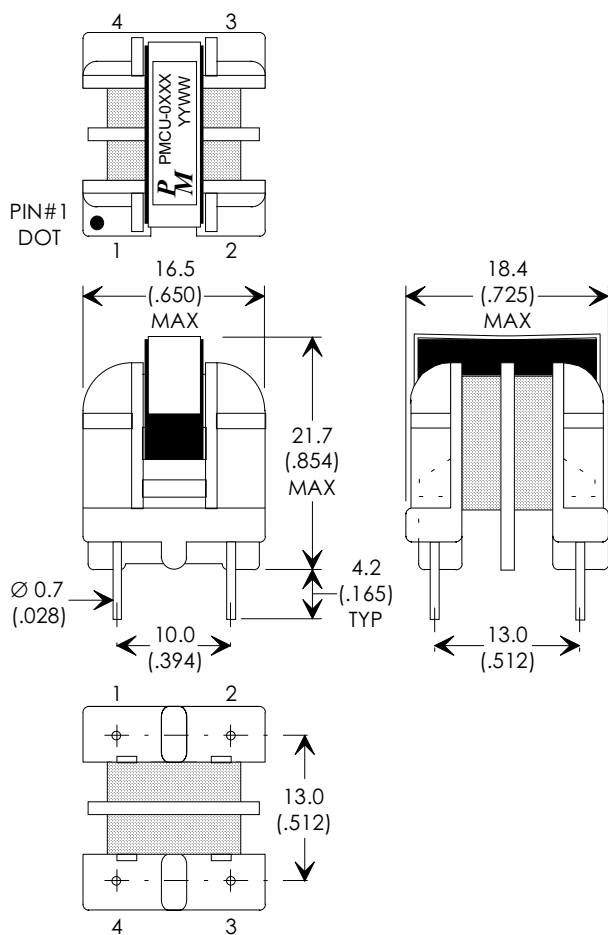
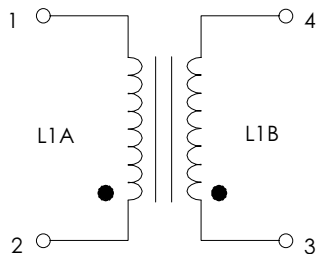
PMCU-XXXX EMI/RFI COMMON MODE LINE FILTERS

PMCU-0XXX U10.5

PMCU-2XXX U16

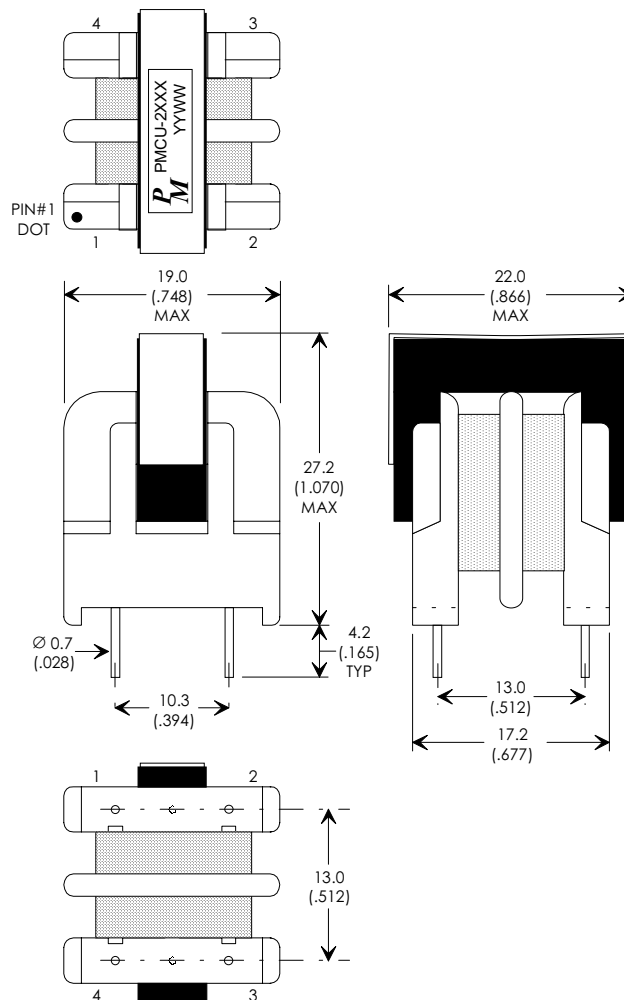
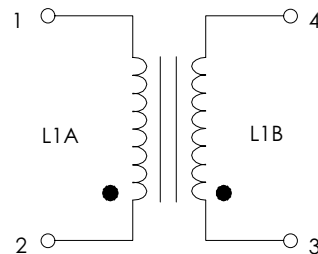
PART IS REVERSIBLE.
IT CAN BE INSERTED INTO PCB EITHER WAY.

DOT ON BOBBIN
DENOTES PIN #1



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DOT ON BOBBIN
DENOTES PIN #1



OPEN COMMON MODE EMI SUPPRESSION INDUCTORS

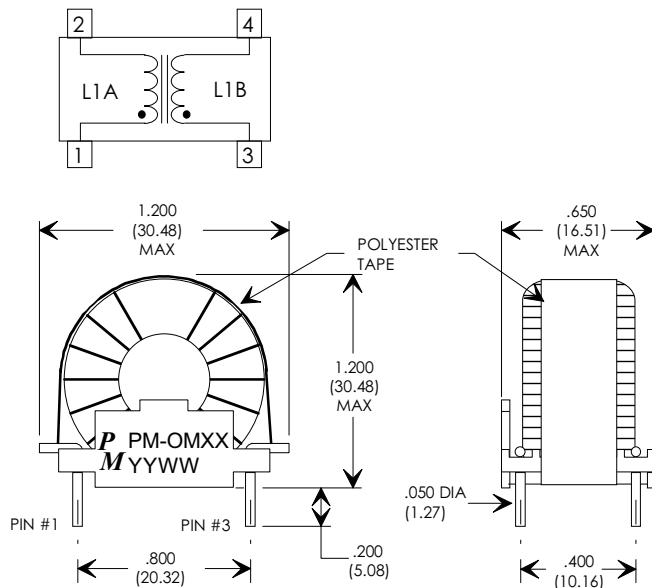
- ① For High Frequency Power Supply Applications
- ② Balanced Windings
- ③ Vertical Mount
- ④ Custom Values Available
- ⑤ 1250 Vrms Minimum Isolation Voltage
- ⑥ Industry Standard Package

NORMAL TEMP RANGE

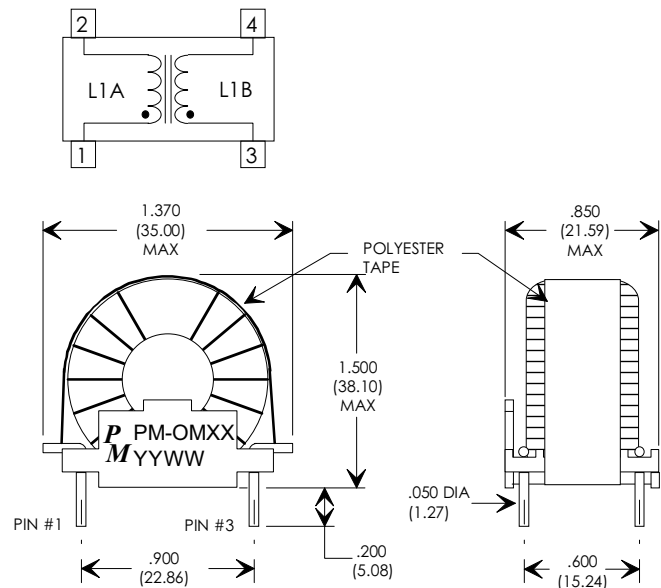
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

PART NUMBER	RATED RMS Current Amps	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	L _L @ 130KHz (μH Max.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		117V	220V				
PM-OM01	1.8	210	420	10.0	130	0.240	A
PM-OM02	3.5	400	800	3.0	35	0.060	A
PM-OM03	6.0	700	1400	1.0	12	0.020	A
PM-OM04	2.6	300	600	16.0	180	0.320	B
PM-OM05	3.2	375	750	8.0	90	0.120	B
PM-OM06	5.2	600	1200	4.0	45	0.040	B
PM-OM07	7.5	875	1750	2.0	25	0.020	B

PACKAGE "A"



PACKAGE "B"



Specifications subject to change without notice.

PM-OMXX 8/01

VERSA-PAC TRANSFORMERS & INDUCTORS

- ① Surface Mount with 1:1:1:1:1
- ② Low Radiated Noise
- ③ Frequency Range Over 1MHz

- ④ 500 VAC Isolation Winding to Winding
- ⑤ Can Be Used As Transformer or Inductor

ELECTRICAL SPECIFICATIONS AT 25°C

PART NUMBER	OCL ($\mu\text{H} \pm 20\%$)	Leak Ind μH (TYP)	Isat A (TYP)	I rms A (TYP)	DCR Ω (MAX)	Volt- μsec μVs (TYP)	E peak μJ (TYP)	Thermal Resistance (TYP)
PM-V011400	89.6 $\pm 30\%$	0.10	0.06	0.85	0.145	21.8	0.11	60.5
PM-V010190	12.2 $\pm 20\%$	0.10	0.43	.085	0.145	21.8	0.77	60.5
PM-V010102	6.5 $\pm 20\%$	0.10	0.80	0.85	0.145	21.8	1.45	60.5
PM-V010076	4.9 $\pm 20\%$	0.10	1.06	0.85	0.145	21.8	1.90	60.5
PM-V010059	3.8 $\pm 20\%$	0.10	1.37	0.85	0.145	21.8	2.40	60.5
PM-V021400	201.6 $\pm 30\%$	0.21	0.04	0.55	0.345	33.0	0.11	60.5
PM-V020190	27.4 $\pm 20\%$	0.21	0.29	0.55	0.345	33.0	0.77	60.5
PM-V020102	6.5 $\pm 20\%$	0.21	0.52	0.55	0.345	33.0	1.45	60.5
PM-V020076	10.9 $\pm 20\%$	0.21	0.70	0.55	0.345	33.0	1.90	60.5
PM-V020059	8.5 $\pm 20\%$	0.21	0.90	0.55	0.345	33.0	2.40	60.5
PM-V031600	078.4 $\pm 3\%$	0.08	0.10	1.25	0.090	34.0	0.30	44.0
PM-V030216	10.6 $\pm 20\%$	0.08	0.76	1.26	0.090	34.0	2.10	44.0
PM-V030116	5.7 $\pm 20\%$	0.80	1.40	1.25	0.090	34.0	4.00	44.0
PM-V030083	4.1 $\pm 20\%$	0.08	1.95	1.25	0.090	34.0	5.50	44.0
PM-V030066	3.2 $\pm 20\%$	0.08	2.50	1.25	0.090	34.0	7.00	44.0
PM-V041600	160 $\pm 30\%$	0.16	0.07	0.95	0.160	48.0	0.30	44.0
PM-V040216	21.6 $\pm 20\%$	0.16	0.55	0.95	0.160	48.0	2.10	44.0
PM-V040116	11.6 $\pm 20\%$	0.16	0.99	0.95	0.160	48.0	4.00	44.0
PM-V040083	8.3 $\pm 20\%$	0.16	1.40	0.95	0.160	48.0	5.50	44.0
PM-V040066	6.6 $\pm 20\%$	0.16	1.75	0.95	0.160	48.0	7.00	44.0
PM-V050780	63.2 $\pm 30\%$	0.06	0.10	1.48	0.060	27.8	0.24	43.4
PM-V030138	11.2 $\pm 20\%$	0.06	0.60	1.48	0.060	27.8	1.36	43.4
PM-V050084	6.8 $\pm 20\%$	0.06	0.97	1.48	0.060	27.8	2.23	43.4
PM-V050055	4.5 $\pm 20\%$	0.06	1.46	1.48	0.060	27.8	3.40	43.4
PM-V050047	3.8 $\pm 20\%$	0.06	1.72	1.48	0.060	27.8	4.00	43.4
PM-V060780	132 $\pm 20\%$	0.12	0.07	0.97	0.14	40.0	0.24	43.4
PM-V060138	23.3 $\pm 20\%$	0.12	0.40	0.97	0.14	40.0	1.36	43.4
PM-V060084	14.2 $\pm 20\%$	0.12	0.67	0.97	0.14	40.0	2.23	43.4
PM-V060055	9.3 $\pm 20\%$	0.12	1.00	0.97	0.14	40.0	3.40	43.4
PM-V060047	7.9 $\pm 20\%$	0.12	1.20	0.97	0.14	40.0	4.00	43.4
PM-V070860	69.7 $\pm 20\%$	0.08	0.15	1.70	0.06	45.0	0.57	39.0
PM-V070140	11.3 $\pm 20\%$	0.08	0.95	1.70	0.06	45.0	3.50	39.0
PM-V070075	6.1 $\pm 20\%$	0.08	1.75	1.70	0.06	45.0	6.50	39.0
PM-V070060	4.9 $\pm 20\%$	0.08	2.18	1.70	0.06	45.0	8.20	39.0
PM-V070047	3.8 $\pm 20\%$	0.08	2.80	1.70	0.06	45.0	10.5	39.0

Specifications subject to change without notice.

pm-vxxxxx

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VERSA-PAC INDUCTORS & TRANSFORMERS

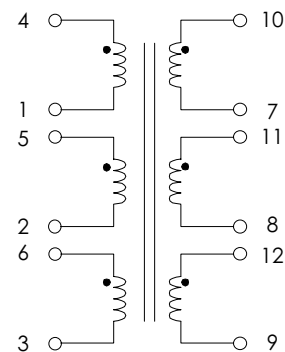
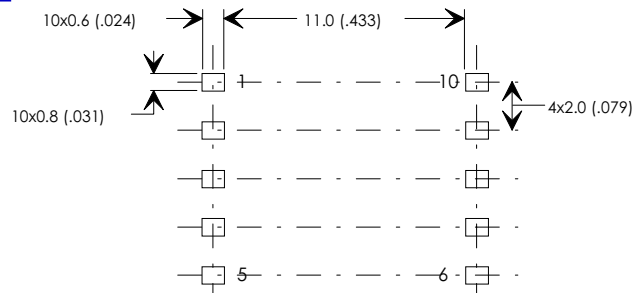
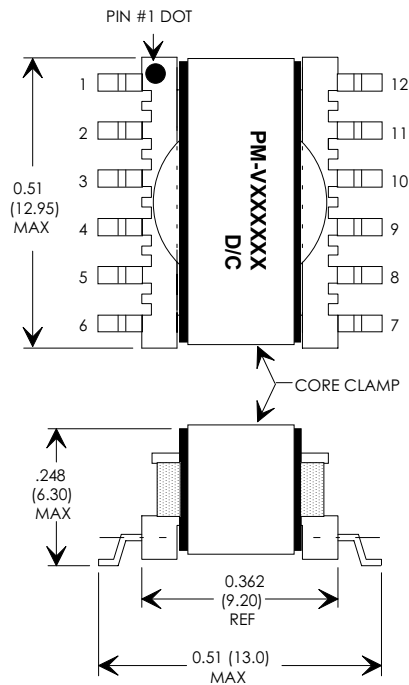
- ① Surface Mount With 1:1:1:1:1:1
- ② Low Radiated Noise
- ③ Frequency Range Over 1MHz

- ④ 500 VAC Isolation Winding to Winding
- ⑤ Can Be Used As Transformer or Inductor

ELECTRICAL SPECIFICATIONS AT 25°C

PART NUMBER	OCL ($\mu\text{H} \pm 20\%$)	Leak Ind μH (TYP)	Isat A (TYP)	I rms A (TYP)	DCR Ω (MAX)	Volt- μsec μVs (TYP)	E peak μJ (TYP)	Thermal Resistance (TYP)
PM-V080860	145 $\pm$ 30%	0.16	0.11	1.40	0.08	64.5	0.57	39.0
PM-V080140	23.7 $\pm$ 20%	0.16	0.65	1.40	0.08	64.5	3.50	39.4
PM-V080075	12.7 $\pm$ 20%	0.16	1.21	1.40	0.08	64.5	6.50	39.4
PM-V080060	10.1 $\pm$ 20%	0.16	1.52	1.40	0.08	64.5	8.20	39.0
PM-V080047	7.94 $\pm$ 20%	0.16	1.94	1.40	0.08	64.5	10.5	39.0
PM-V091200	76.8 $\pm$ 30%	0.10	0.20	2.0	0.05	65.5	1.10	30.0
PM-V090155	9.90 $\pm$ 20%	0.10	1.60	2.0	0.05	65.5	8.80	30.0
PM-V090083	5.30 $\pm$ 20%	0.10	2.95	2.0	0.05	65.5	16.1	30.0
PM-V090067	4.30 $\pm$ 20%	0.10	3.60	2.0	0.05	65.5	19.8	30.0
PM-V090053	3.40 $\pm$ 20%	0.10	4.60	2.0	0.05	65.5	25.1	30.0
PM-V101200	173 $\pm$ 30%	0.24	0.14	1.70	0.07	98.0	1.10	30.0
PM-V100155	22.3 $\pm$ 20%	0.24	1.05	1.70	0.07	98.0	8.80	30.0
PM-V100083	12.0 $\pm$ 20%	0.24	1.95	1.70	0.07	98.0	16.1	30.0
PM-V100067	9.65 $\pm$ 20%	0.24	2.40	1.70	0.07	98.0	19.8	30.0
PM-V100053	7.63 $\pm$ 20%	0.24	3.10	1.70	0.07	98.0	25.1	30.0

PM-V01 & PM-V02 MECHANICAL



RATIO 1:1:1:1:1:1

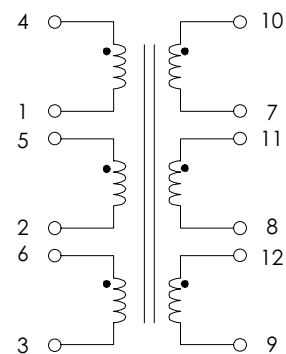
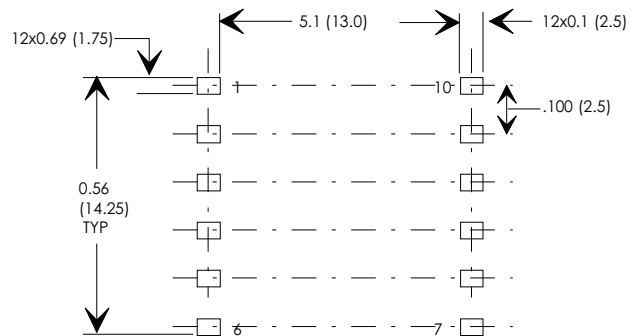
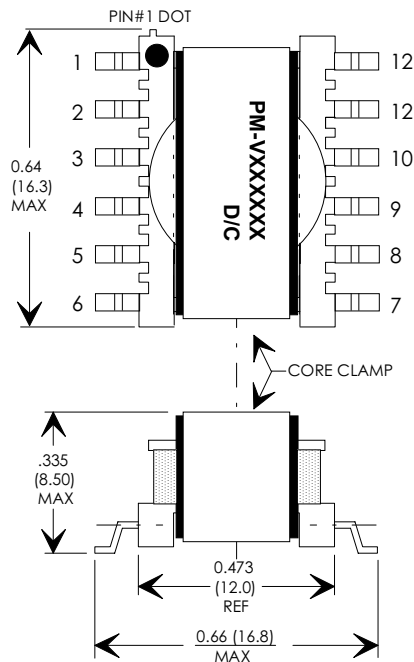
Specifications subject to change without notice.

pm-vxxxxx

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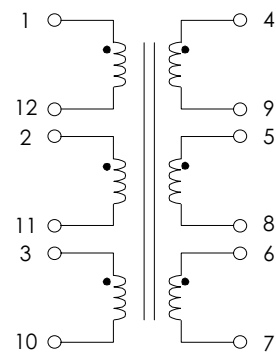
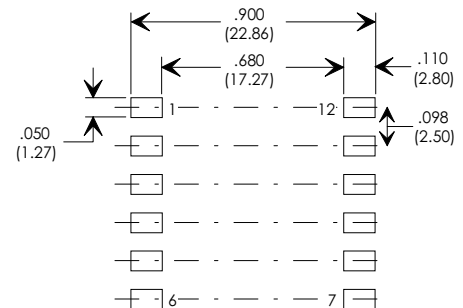
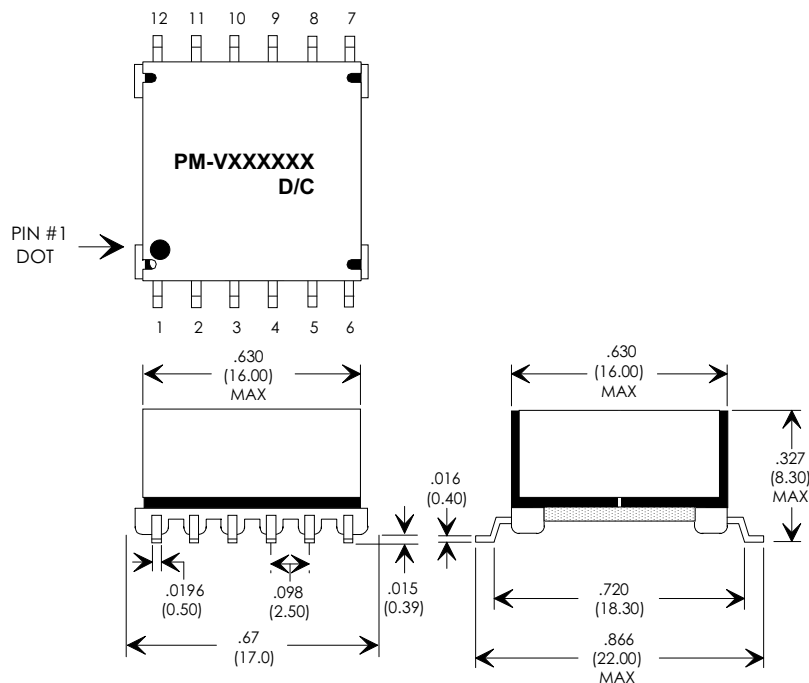
VERSA-PAC INDUCTORS & TRANSFORMERS

PM-V03 & PM-V04 MECHANICAL



RATIO 1:1:1:1:1:1

PM-V05 & PM-V06 MECHANICAL



RATIO 1:1:1:1:1:1

Diagram of a 1:1:1:1:1 transformer. The primary side (left) has five windings with terminals 1, 12, 2, 11, 3, and 10. The secondary side (right) has five windings with terminals 4, 9, 5, 8, 6, and 7. The ratio is labeled as RATIO 1:1:1:1:1.

RATIO 1:1:1:1:1:1

110

GATE DRIVE & BASE DRIVE TRANSFORMERS

- ① Designs for Single or Double Ended Controllers
- ② High Isolation Voltages
- ③ Designs From 20KHz to >300KHz

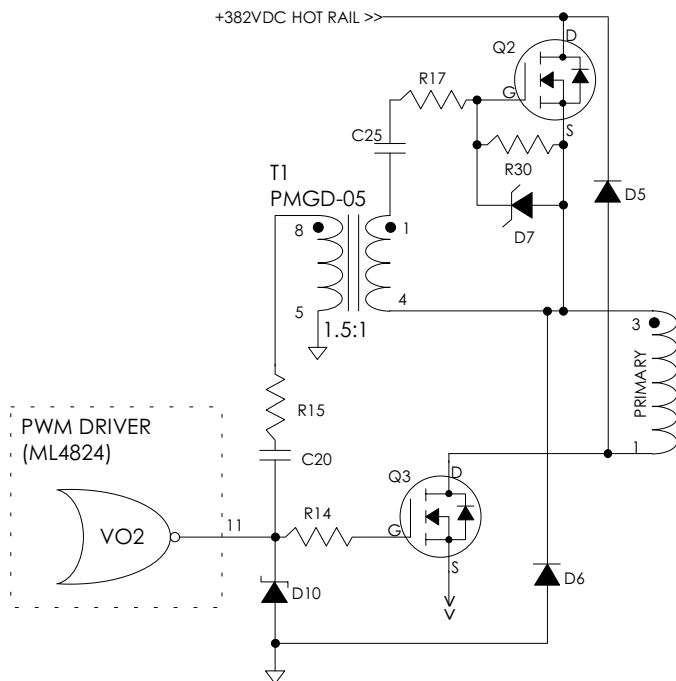
- ④ Very Low Leakage Inductance
- ⑤ Industry Standard Packages
- ⑥ Multiple Configurations

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

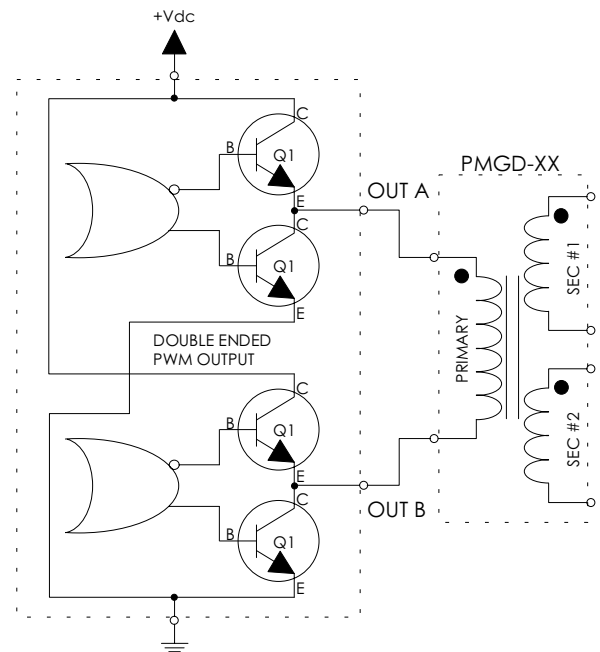
PART NUMBER	URNS RATIO (Pri:Sec ± 5%)	PRIMARY OCL (μH Typ.)	LEAKAGE IND (μH Max.)	PRI/SEC HI-POT V	PACKAGE	TYPICAL APPLICATION NOTE
PMGD-02	1 : 1 : 1	530	1.5	1500dc	EP13	150KHz Double Ended Drive
PMGD-03	1 : 1	800	2.0	1500dc	EP7	100KHz Single Ended Drive
PMGD-04	1 : 1 : 1	24500	20.0	1000dc	EP10	20KHz Double Ended Drive
PMGD-05	1 : 0.67	6200	15.0	1000dc	EP10	25KHz Single Ended Drive
PMGD-06	1 : 1	6200	15.0	2000ac	EP10	100KHz Double Ended Drive
PMGD-07	1 : 2 : 2	2350	2.0	1500ac	EP13	40KHz Dual Single Ended Drive
PMGD-08	1 : 1.25 : 1.25	575	1.0	3000ac	EP13	180KHz Dual Single Ended Drive
PMGD-09	1 : 2 : 2	2350	2.0	3000ac	EP13	40KHz Dual Single Ended Drive
PMGD-10	1 : 2 : 2	8350	25.0	2500ac	EP13	20KHz Dual Single Ended Drive

TYPICAL APPLICATIONS

TYPICAL SINGLE ENDED APPLICATION CIRCUIT



TYPICAL DOUBLE ENDED APPLICATION CIRCUIT



GATE DRIVE & BASE DRIVE TRANSFORMERS

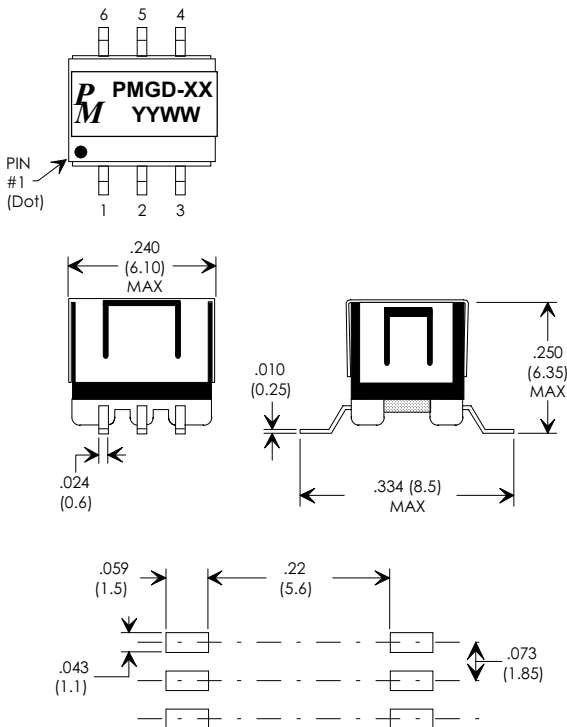
- ① Designs for Gate/Base/Flyback/Push-Pull
- ② High Isolation Voltages
- ③ Operating Frequency from 50KHz and Higher

- ④ SMD Industry Standard Packages
- ⑤ Operation Temp -40C to +85C
- ⑥ Multiple Configurations

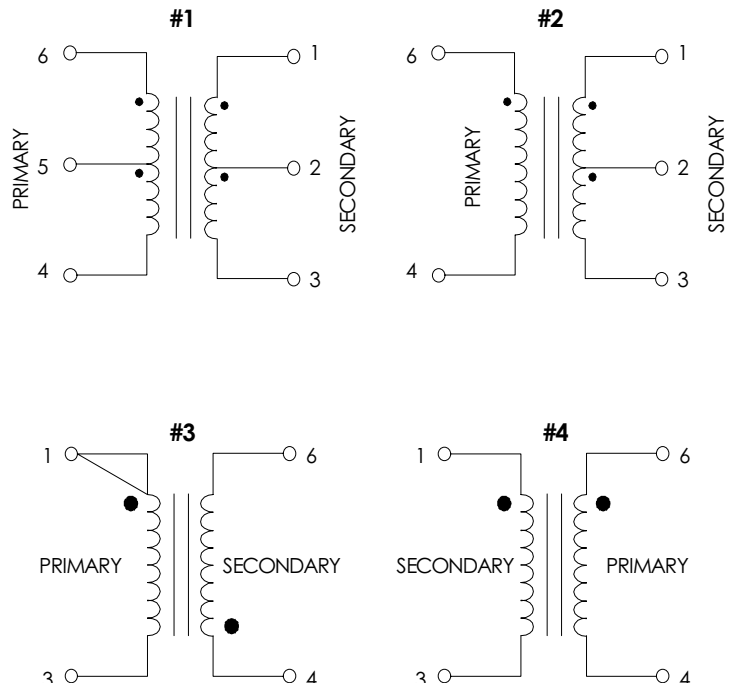
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +85°C

PART NUMBER	TURNS RATIO (Pri:Sec ± 5%)	PRIMARY OCL (μH)	LEAKAGE IND (μH tpy.)	PRI DCR (Ω MAX.)	SEC DCR (Ω MAX.)	PRI/SEC HI-POT VDC	PACKAGE/ SCHEMATIC
PMGD-50	1CT : 1CT	800 MIN	3.00	3.50	3.50	1250	EP5G/1
PMGD-51	1CT : 2CT	390 MIN	1.50	2.25	4.50	1250	EP5G/1
PMGD-52	1CT : 2.5CT	390 MIN	1.50	2.25	6.00	1250	EP5G/1
PMGD-53	1CT : 3CT	2000 MIN	1.20	3.00	25.00	1250	EP5G/1
PMGD-54	1 : 1CT	2000 MIN	1.20	2.75	2.75	1250	EP5G/2
PMGD-55	1 : 2CT	17.2 ± 20%	1.00	1.25	3.00	1250	EP5G/2
PMGD-56	1 : 12.04	3.7 ± 20%	0.275	0.90	12.25	550	EP5G/3
PMGD-57	1 : 3.0	9.88 ± 20%	0.500	1.00	3.25	1250	EP5G/4

EP5G MECHANICAL

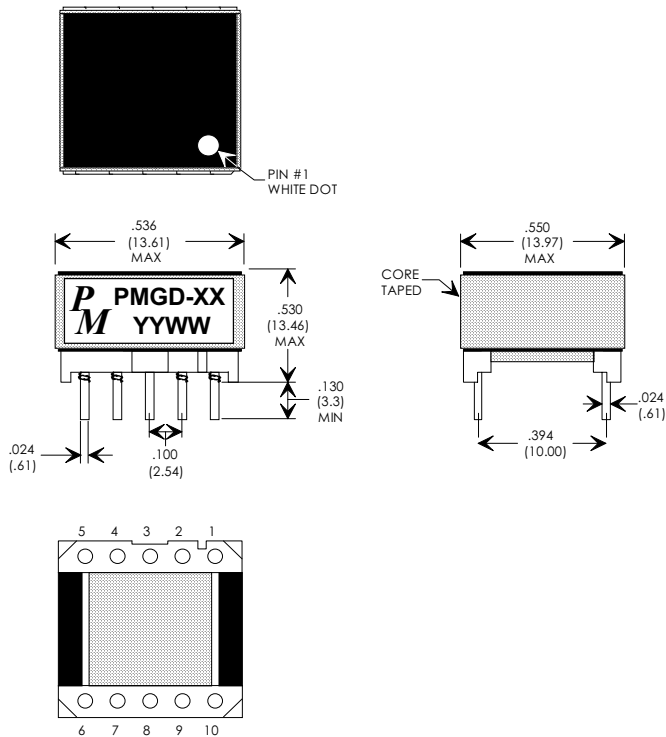


EP5G SCHEMATICS

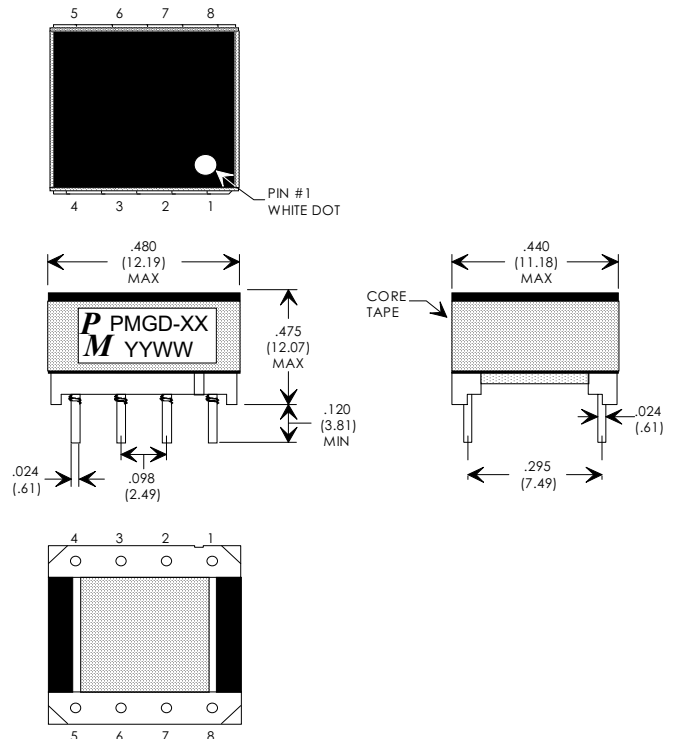


GATE DRIVE & BASE DRIVE TRANSFORMERS

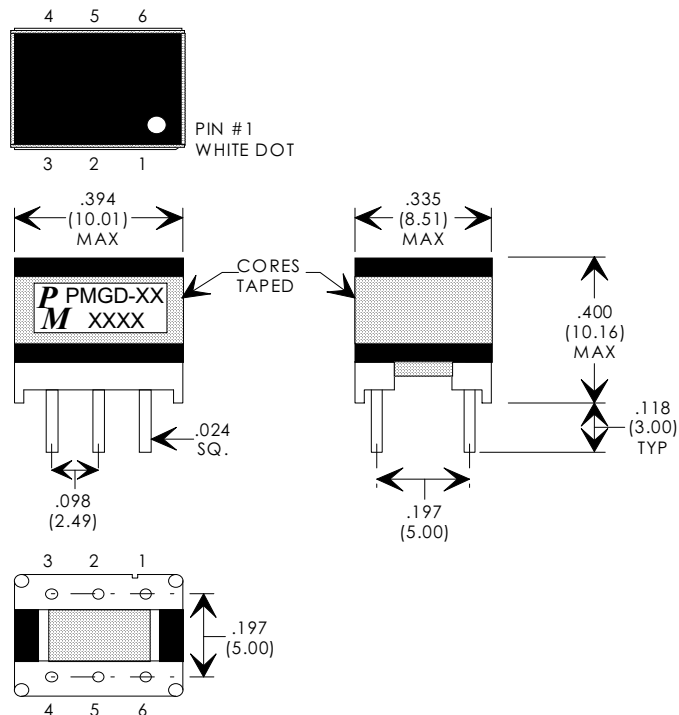
EP13 MECHANICALS



EP10 MECHANICALS



EP7 MECHANICALS



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pmgd 04/03

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SPLIT BOBBIN HIGH ISOLATION POWER TRANSFORMERS

Parts are UL & CSA Recognized Under UL File

- ① 115V Single -or- 115/230V Dual Primaries, 50/60Hz
- ② Low Capacitive Coupling Minimizes Line Noise
- ③ Dual Secondaries May Be Series -or- Parallel Connected
- ④ 1.1VA To 36VA
- ⑤ 2500Vrms Isolation (Hi-Pot)
- ⑥ Split Bobbin Construction

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

PART NUMBER		SIZE (VA)	SECONDARY RMS RATINGS	
SINGLE 115V	DUAL 115/230V		SERIES	PARALLEL
PSB-101	PSB-101D	1.1	10V C.T. @ 110mA	5V @ 220mA
PSB-102	PSB-102D	2.4	10V C.T. @ 250mA	5V @ 500mA
PSB-106	PSB-106D	6	10V C.T. @ 600mA	5V @ 1200mA
PSB-1012	PSB-1012D	12	10V C.T. @ 1200mA	5V @ 2400mA
PSB-1020	PSB-1020D	20	10V C.T. @ 2000mA	5V @ 4000mA
PSB-1036	PSB-1036D	36	10V C.T. @ 3600mA	5V @ 7200mA
PSB-121	PSB-121D	1.1	12V C.T. @ 90mA	6V @ 180mA
PSB-122	PSB-122D	2.4	12V C.T. @ 200mA	6V @ 400mA
PSB-126	PSB-126D	6	12V C.T. @ 500mA	6V @ 1000mA
PSB-1212	PSB-1212D	12	12V C.T. @ 1000mA	6V @ 2000mA
PSB-1220	PSB-1220D	20	12V C.T. @ 1600mA	6V @ 3200mA
PSB-1236	PSB-1236D	36	12V C.T. @ 2850mA	6V @ 5700mA
PSB-161	PSB-161D	1.1	16V C.T. @ 70mA	8V @ 140mA
PSB-162	PSB-162D	2.4	16V C.T. @ 150mA	8V @ 300mA
PSB-166	PSB-166D	6	16V C.T. @ 400mA	8V @ 800mA
PSB-1612	PSB-1612D	12	16V C.T. @ 800mA	8V @ 1600mA
PSB-1620	PSB-1620D	20	16V C.T. @ 1250mA	8V @ 2500mA
PSB-1636	PSB-1636D	36	16V C.T. @ 2250mA	8V @ 4500mA
PSB-201	PSB-201D	1.1	20V C.T. @ 55mA	10V @ 110mA
PSB-202	PSB-202D	2.4	20V C.T. @ 120mA	10V @ 240mA
PSB-206	PSB-206D	6	20V C.T. @ 300mA	10V @ 600mA
PSB-2012	PSB-2012D	12	20V C.T. @ 600mA	10V @ 1200mA
PSB-2020	PSB-2020D	20	20V C.T. @ 1000mA	10V @ 2000mA
PSB-2036	PSB-2036D	36	20V C.T. @ 1800mA	10V @ 3600mA
PSB-241	PSB-241D	1.1	24V C.T. @ 45mA	12V @ 90mA
PSB-242	PSB-242D	2.4	24V C.T. @ 100mA	12V @ 200mA
PSB-246	PSB-246D	6	24V C.T. @ 250mA	12V @ 500mA
PSB-2412	PSB-2412D	12	24V C.T. @ 500mA	12V @ 1000mA
PSB-2420	PSB-2420D	20	24V C.T. @ 800mA	12V @ 1600mA
PSB-2436	PSB-2436D	36	24V C.T. @ 1500mA	12V @ 3000mA

PART NUMBER		SIZE (VA)	SECONDARY RMS RATINGS	
SINGLE 115V	DUAL 115/230V		SERIES	PARALLEL
PSB-281	PSB-281D	1.1	28V C.T. @ 40mA	14V @ 80mA
PSB-282	PSB-282D	2.4	28V C.T. @ 85mA	14V @ 170mA
PSB-286	PSB-286D	6	28V C.T. @ 200mA	14V @ 400mA
PSB-2812	PSB-2812D	12	28V C.T. @ 420mA	14V @ 840mA
PSB-2820	PSB-2820D	20	28V C.T. @ 700mA	14V @ 1400mA
PSB-2836	PSB-2836D	36	28V C.T. @ 1300mA	14V @ 2600mA
PSB-361	PSB-361D	1.1	36V C.T. @ 30mA	18V @ 60mA
PSB-362	PSB-362D	2.4	36V C.T. @ 65mA	18V @ 130mA
PSB-366	PSB-366D	6	36V C.T. @ 170mA	18V @ 340mA
PSB-3612	PSB-3612D	12	36V C.T. @ 350mA	18V @ 700mA
PSB-3620	PSB-3620D	20	36V C.T. @ 550mA	18V @ 1100mA
PSB-3636	PSB-3636D	36	36V C.T. @ 1000mA	18V @ 2000mA
PSB-481	PSB-481D	1.1	48V C.T. @ 23mA	24V @ 46mA
PSB-482	PSB-482D	2.4	48V C.T. @ 50mA	24V @ 100mA
PSB-486	PSB-486D	6	48V C.T. @ 125mA	24V @ 250mA
PSB-4812	PSB-4812D	12	48V C.T. @ 250mA	24V @ 500mA
PSB-4820	PSB-4820D	20	48V C.T. @ 400mA	24V @ 800mA
PSB-4836	PSB-4836D	36	48V C.T. @ 750mA	24V @ 1500mA
PSB-561	PSB-561D	1.1	56V C.T. @ 20mA	28V @ 40mA
PSB-562	PSB-562D	2.4	56V C.T. @ 45mA	28V @ 90mA
PSB-566	PSB-566D	6	56V C.T. @ 110mA	28V @ 220mA
PSB-5612	PSB-5612D	12	56V C.T. @ 220mA	28V @ 440mA
PSB-5620	PSB-5620D	20	56V C.T. @ 350mA	28V @ 700mA
PSB-5636	PSB-5636D	36	56V C.T. @ 650mA	28V @ 1300mA
PSB-1201	PSB-1201D	1.1	120V C.T. @ 10mA	60V @ 20mA
PSB-1202	PSB-1202D	2.4	120V C.T. @ 20mA	60V @ 40mA
PSB-1206	PSB-1206D	6	120V C.T. @ 50mA	60V @ 100mA
PSB-12012	PSB-12012D	12	120V C.T. @ 100mA	60V @ 200mA
PSB-12020	PSB-12020D	20	120V C.T. @ 160mA	60V @ 320mA
PSB-12036	PSB-12036D	36	120V C.T. @ 300mA	60V @ 600mA

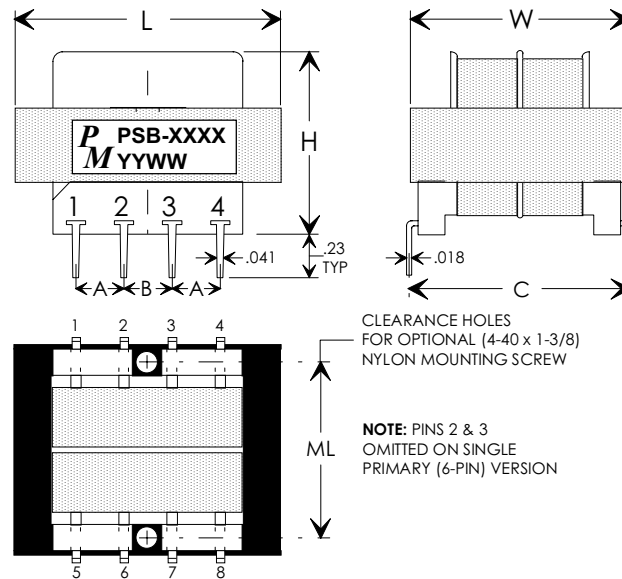
Specifications subject to change without notice.

psb 4/97

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SPLIT BOBBIN HIGH ISOLATION POWER TRANSFORMERS

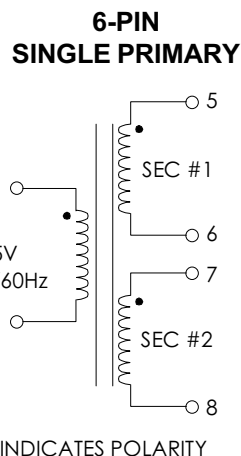
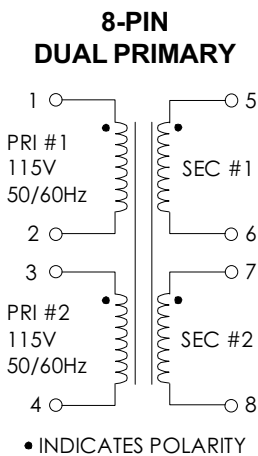
PSB-XXX MECHANICAL



SIZE (VA)	DIMENSIONS IN INCHES						
	L	W	H	ML	A	B	C
1.1	1-3/8	1-1/8	0-15/16	N/A	.250	.250	1.200
2.4	1-3/8	1-1/8	1-3/16	N/A	.250	.250	1.200
6	1-5/8	1-5/16	1-5/16	1-1/16	.250	.350	1.280
12	1-7/8	1-9/16	1-7/16	1-1/4	.300	.400	1.410
20	2-1/4	1-7/8	1-7/16	1-1/2	.300	.400	1.600
36	2-5/8	2-3/16	1-9/16	N/A	.400	.400	1.850

FOR INTERMEDIATE VALUES AND/ OR CUSTOM DESIGNS CONSULT THE FACTORY.

SCHEMATIC



APPLICATION

PSB-SERIES 6-SIZES: 1.1 TO 36VA

SINGLE PRIMARY: 6-PIN, 115V - 50/60Hz

DUAL PRIMARIES: 8-PIN PACKAGE
 Series for 230V - 50/60Hz
 Parallel for 115V - 50/60Hz

SHROUDED SPLIT BOBBIN HIGH ISOLATION POWER TRANSFORMERS

Parts are UL & CSA Recognized Under UL File

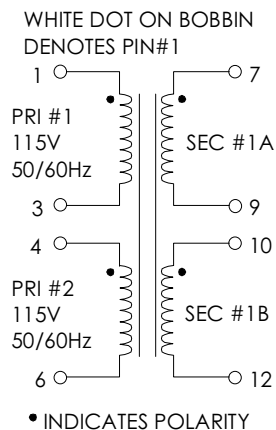
- ① 115/230V, 50/60Hz Dual Primaries
- ② Low Capacitive Coupling Minimizes Line Noise
- ③ Dual Secondaries May Be Series -or- Parallel Connected
- ④ PVD-SERIES 6-SIZES: 2.5 TO 56VA
- ⑤ 4000Vrms Isolation (Hi-Pot)
- ⑥ Shrouded Split Bobbin Construction

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

P/N DUAL 115/230V	SIZE (VA)	SECONDARY RMS RATINGS	
		SERIES	PARALLEL
PVD-102	2.5	10V C.T. @ .25A	5V @ .50A
PVD-105	5	10V C.T. @ .50A	5V @ 1.00A
PVD-1010	10	10V C.T. @ 1.00A	5V @ 2.00A
PVD-1020	20	10V C.T. @ 2.00A	5V @ 4.00A
PVD-1030	30	10V C.T. @ 3.00A	5V @ 6.00A
PVD-1056	56	10V C.T. @ 5.60A	5V @ 11.20A
PVD-122	2.5	12.6V C.T. @ .20A	6.3V @ .40A
PVD-125	5	12.6V C.T. @ .40A	6.3V @ .80A
PVD-1210	10	12.6V C.T. @ .80A	6.3V @ 1.60A
PVD-1220	20	12.6V C.T. @ 1.60A	6.3V @ 3.20A
PVD-1230	30	12.6V C.T. @ 2.40A	6.3V @ 4.80A
PVD-1256	56	12.6V C.T. @ 4.40A	6.3V @ 8.80A
PVD-162	2.5	16V C.T. @ .15A	8V @ .30A
PVD-165	5	16V C.T. @ .31A	8V @ .62A
PVD-1610	10	16V C.T. @ .62A	8V @ 1.25A
PVD-1620	20	16V C.T. @ 1.25A	8V @ 2.50A
PVD-1630	30	16V C.T. @ 1.90A	8V @ 3.80A
PVD-1656	56	16V C.T. @ 3.50A	8V @ 7.00A
PVD-202	2.5	20V C.T. @ .12A	10V @ .24A
PVD-205	5	20V C.T. @ .25A	10V @ .50A
PVD-2010	10	20V C.T. @ .50A	10V @ 1.00A
PVD-2020	20	20V C.T. @ 1.00A	10V @ 2.00A
PVD-2030	30	20V C.T. @ 1.50A	10V @ 3.00A
PVD-2056	56	20V C.T. @ 2.80A	10V @ 5.60A

P/N DUAL 115/230V	SIZE (VA)	SECONDARY RMS RATINGS	
		SERIES	PARALLEL
PVD-242	2.5	24V C.T. @ .10A	12V @ .20A
PVD-245	5	24V C.T. @ .21A	12V @ .42A
PVD-2410	10	24V C.T. @ .42A	12V @ .84A
PVD-2420	20	24V C.T. @ .83A	12V @ 1.66A
PVD-2430	30	24V C.T. @ 1.25A	12V @ 2.50A
PVD-2456	56	24V C.T. @ 2.33A	12V @ 4.66A
PVD-282	2.5	28V C.T. @ .09A	14V @ .18A
PVD-285	5	28V C.T. @ .18A	14V @ .36A
PVD-2810	10	28V C.T. @ .36A	14V @ .72A
PVD-2820	20	28V C.T. @ .72A	14V @ 1.44A
PVD-2830	30	28V C.T. @ 1.06A	14V @ 2.12A
PVD-2856	56	28V C.T. @ 2.00A	14V @ 4.00A
PVD-362	2.5	36V C.T. @ .07A	18V @ .14A
PVD-365	5	36V C.T. @ .14A	18V @ .28A
PVD-3610	10	36V C.T. @ .28A	18V @ .56A
PVD-3620	20	36V C.T. @ .56A	18V @ 1.12A
PVD-3630	30	36V C.T. @ .82A	18V @ 1.64A
PVD-3656	56	36V C.T. @ 1.56A	18V @ 3.12A

SCHEMATIC



APPLICATION

DUAL PRIMARIES:

Series for 230V - 50/60Hz
Parallel for 115V - 50/60Hz

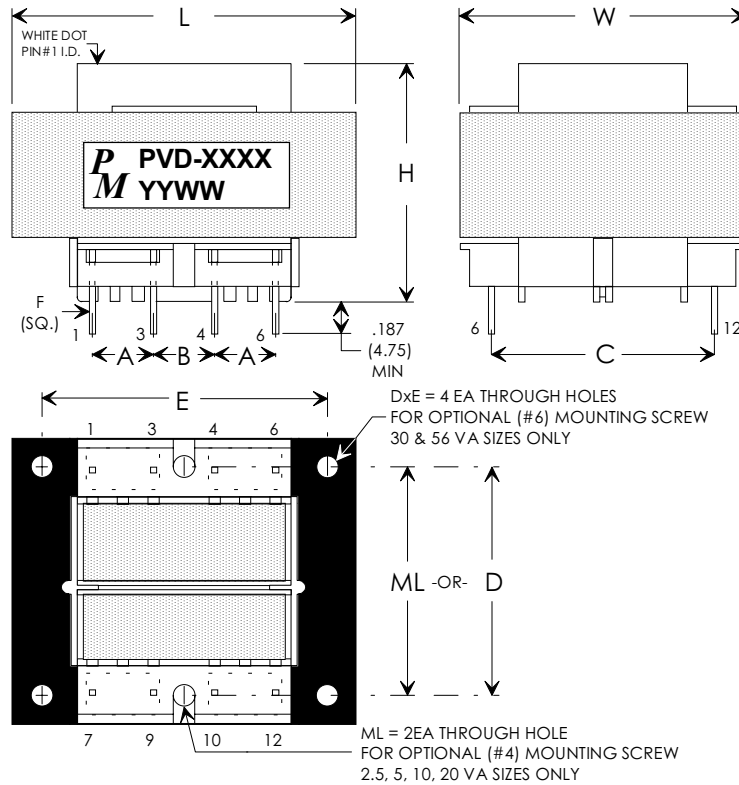
HI-POT:

4000Vac Primary To Secondary
4000Vac Windings to Core
130°C Insulation System

Note: Primary and Secondary windings are designed to be used as one primary & one secondary winding. That is, they must each be used simultaneously either parallel or series connected.

SHROUDED SPLIT BOBBIN HIGH ISOLATION POWER TRANSFORMERS

PVD-XXX MECHANICAL



SIZE (VA)	NOMINAL DIMENSIONS IN INCHES									
	L	W	H	A	B	C	ML	D ¹	E ¹	F
2.5	1-5/8	1-5/16	1.125	.200	.250	1.000	1-1/16	-----	-----	.025
5	1-5/8	1-5/16	1.375	.200	.400	1.000	1-1/16	-----	-----	.025
10	1-7/8	1-9/16	1.375	.200	.400	1.128	1-1/4	-----	-----	.036
20	2-1/4	1-7/8	1.625	.400	.400	1.436	1-1/2	-----	-----	.036
30	2-5/8	2-3/16	1.575	.550	.275	1.650	-----	1-3/4	2-3/16	.045
56	3.000	2.500	1.820	.600	.300	1.866	-----	2.000	2-1/2	.045

NOTES:

- 1) 4-HOLE CORNER PATTERN
APPLIES TO 30 & 56VA SIZES ONLY
- 2) WHITE DOT ON TOP OF PART
DENOTES PIN#1

FOR INTERMEDIATE VALUES OR CUSTOM DESIGNS PLEASE CONSULT THE FACTORY.



LOW PROFILE DUAL BOBBIN HIGH ISOLATION POWER TRANSFORMERS

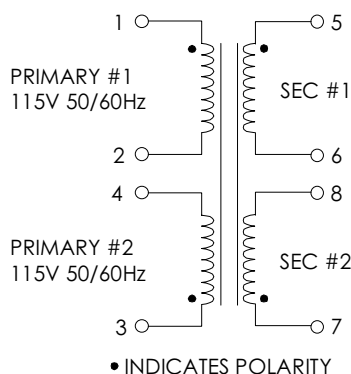
- ① Low Height, Ideal for P.C.B. Applications
- ② Dual Secondaries May Be Series -or- Parallel Connected
- ③ Construction Minimizes Radiated Magnetic Fields
- ④ 115/230V, 50/60Hz Dual Primaries
- ⑤ Split Bobbin Construction
- ⑥ 1500Vrms Isolation (Hi-Pot)

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +80°C

115/230V PART NUMBER	SIZE (VA)	SECONDARY RMS RATINGS	
		SERIES	PARALLEL
PLP-102	2.5	10V C.T. @ 250mA	5V @ 500mA
PLP-106	6.0	10V C.T. @ 600mA	5V @ 1.2A
PLP-1012	12.0	10V C.T. @ 1200mA	5V @ 2.4A
PLP-122	2.5	12.6V C.T. @ 200mA	6.3V @ 400mA
PLP-126	6.0	12.6V C.T. @ 450mA	6.3V @ 900mA
PLP-1212	12.0	12.6V C.T. @ 900mA	6.3V @ 1.8A
PLP-162	2.5	16V C.T. @ 150mA	8V @ 300mA
PLP-166	6.0	16V C.T. @ 350mA	8V @ 700mA
PLP-1612	12.0	16V C.T. @ 700mA	8V @ 1.4A
PLP-202	2.5	20V C.T. @ 125mA	10V @ 250mA
PLP-206	6.0	20V C.T. @ 300mA	10V @ 600mA
PLP-2012	12.0	20V C.T. @ 600mA	10V @ 1.2A
PLP-242	2.5	24V C.T. @ 100mA	12V @ 200mA
PLP-246	6.0	24V C.T. @ 250mA	12V @ 500mA
PLP-2412	12.0	24V C.T. @ 500mA	12V @ 1.0A
PLP-302	2.5	30V C.T. @ 85mA	15V @ 170mA
PLP-306	6.0	30V C.T. @ 200mA	15V @ 400mA
PLP-3012	12.0	30V C.T. @ 400mA	15V @ 800mA
PLP-342	2.5	34V C.T. @ 75mA	17V @ 150mA
PLP-346	6.0	34V C.T. @ 170mA	17V @ 340mA
PLP-3412	12.0	34V C.T. @ 340mA	17V @ 680mA
PLP-402	2.5	40V C.T. @ 60mA	20V @ 120mA
PLP-406	6.0	40V C.T. @ 150mA	20V @ 300mA
PLP-4012	12.0	40V C.T. @ 300mA	20V @ 600mA
PLP-562	2.5	56V C.T. @ 45mA	28V @ 90mA
PLP-566	6.0	56V C.T. @ 100mA	28V @ 200mA
PLP-5612	12.0	56V C.T. @ 200mA	28V @ 400mA
PLP-882	2.5	88V C.T. @ 28mA	44V @ 56mA
PLP-886	6.0	88V C.T. @ 65mA	44V @ 130mA
PLP-8812	12.0	88V C.T. @ 130mA	44V @ 260mA

115/230V PART NUMBER	SIZE (VA)	SECONDARY RMS RATINGS	
		SERIES	PARALLEL
PLP-1024	24.0	10V C.T. @ 2.40A	5V @ 4.80A
PLP-1048	48.0	10V C.T. @ 4.80A	5V @ 9.60A
PLP-1224	24.0	12.6V C.T. @ 1.90A	6.3V @ 3.80A
PLP-1248	48.0	12.6V C.T. @ 3.80A	6.3V @ 7.60A
PLP-1624	24.0	16V C.T. @ 1.50A	8V @ 3.00A
PLP-1648	48.0	16V C.T. @ 3.00A	8V @ 6.00A
PLP-2024	24.0	20V C.T. @ 1.20A	10V @ 2.40A
PLP-2048	48.0	20V C.T. @ 2.40A	10V @ 4.80A
PLP-2424	24.0	24V C.T. @ 1.00A	12V @ 2.00A
PLP-2448	48.0	24V C.T. @ 2.00A	12V @ 4.00A
PLP-3024	24.0	30V C.T. @ 0.80A	15V @ 1.60A
PLP-3048	48.0	30V C.T. @ 1.60A	15V @ 3.20A
PLP-3424	24.0	34V C.T. @ 0.70A	17V @ 1.40A
PLP-3448	48.0	34V C.T. @ 1.40A	17V @ 2.80A
PLP-4024	24.0	40V C.T. @ 0.60A	20V @ 1.20A
PLP-4048	48.0	40V C.T. @ 1.20A	20V @ 2.40A
PLP-5624	24.0	56V C.T. @ 0.425A	28V @ 0.850A
PLP-5648	48.0	56V C.T. @ 0.850A	28V @ 1.70A
PLP-8824	24.0	88V C.T. @ 0.270A	44V @ 0.540A
PLP-8848	48.0	88V C.T. @ 0.545A	44V @ 1.09A

SCHEMATIC



PLP-SERIES 5-SIZES:

2.5VA	-	0.650" HIGH
6.0VA	-	0.850" HIGH
12.0VA	-	1.065" HIGH
24.0VA	-	1.250" HIGH
48.0VA	-	1.375" HIGH

SECONDARIES:

Connected series or parallel

PRIMARIES:

Series for 230V - 50/60Hz
Parallel for 115V - 50/60Hz

APPLICATION

SPLIT BOBBIN:

Provides high isolation and low capacitive coupling which minimizes line noise.

REGULATION:

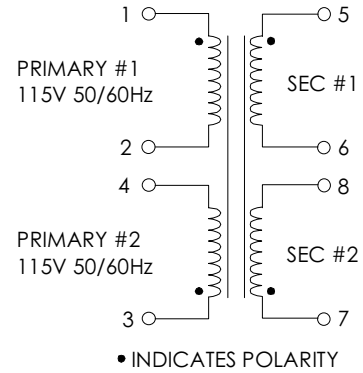
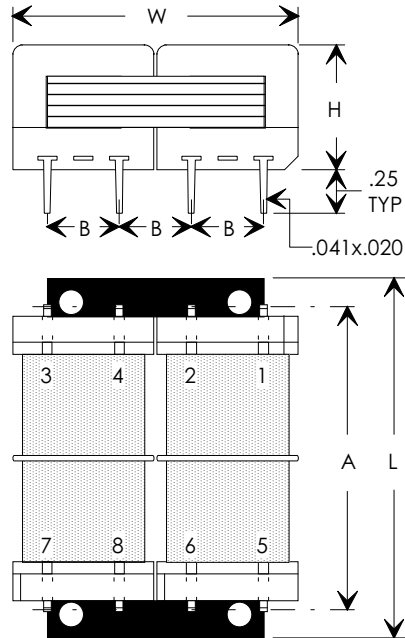
2.5VA	-	30%
6.0VA	-	30%
12.0VA	-	20%
24.0VA	-	15%
48.0VA	-	15%

Note: Primary and Secondary windings are designed to be used as one primary & one secondary winding. That is, they must each be used simultaneously either parallel or series connected.

LOW PROFILE DUAL BOBBIN HIGH ISOLATION POWER TRANSFORMERS

PLP-XXX MECHANICAL

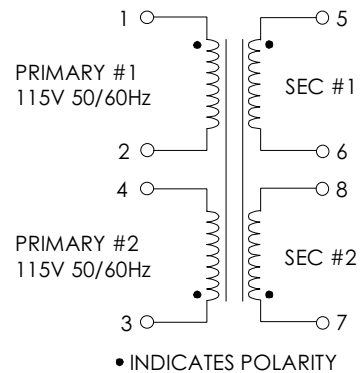
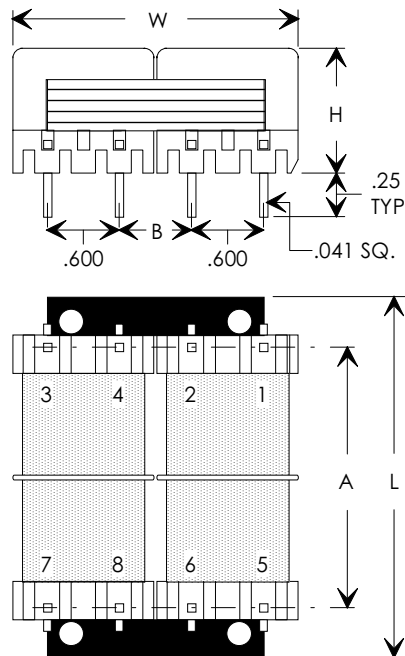
2.5 TO 12VA SIZES



SIZE (VA)	DIMENSIONS IN INCHES				
	A	B	L	W	H
2.5	1.600	0.375	1.87	1.56	0.650
6.0	1.600	0.375	1.87	1.56	0.850
12.0	2.000	0.500	2.50	2.00	1.065

PLP-XXX MECHANICAL

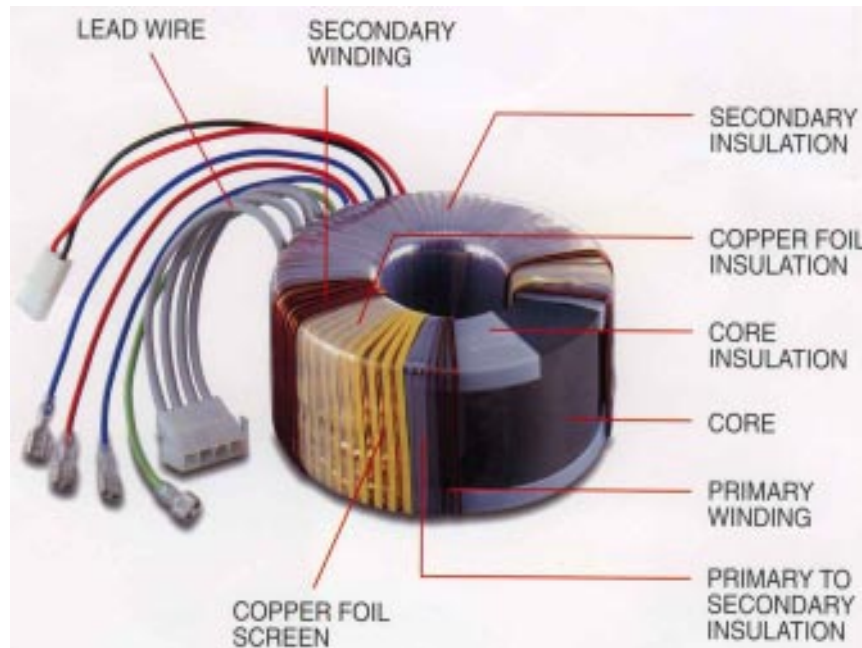
24 & 48VA SIZES



SIZE (VA)	DIMENSIONS IN INCHES				
	A	B	L	W	H
24.0	1.900	0.530	2.87	2.25	1.250
48.0	2.180	0.660	3.12	2.50	1.375

TOROIDAL POWER TRANSFORMERS

- ① Meets UL, CSA, VDE Requirements.
- ② All Units meet 4000Vrms Hi-pot .
- ③ Available with either 115V, 50-400 Hz or 115/230V Input.
- ④ Mounting Hardware Accessory Option Available Upon Request
(Metal Washer, Silicone Rubber Pads, Plastic Washers, Screws/Nuts)



DIMENSIONS

P PT-xxxxx
M YYWW

Power (VA)	Dimensions (D x H)	Weight (lbs)
18	2.4" x 1.4"	0.7
36	2.8" x 1.6"	1.1
60	3.2" x 1.7"	1.5
100	3.9" x 1.6"	2.8
155	4.4" x 1.6"	3.7
200	4.4" x 1.9"	4.2
325	4.4" x 2.6"	6.2
440	5.3" x 2.3"	7.5
585	5.3" x 2.8"	9.0
690	5.3" x 3.2"	10.3





TOROIDAL POWER TRANSFORMERS

ELECTRICAL SPECIFICATIONS AT 25°C

PART NUMBER	Power (VA)	AC Output Series V @ I	DC Output	
			Series V @ I	Parallel V @ I
PT-18012	18	12 @ 1.5	13.2 @ 1.0	5.6 @ 2.0
PT-18018	18	18 @ 1.0	21.0 @ 0.6	9.5 @ 1.3
PT-18024	18	24 @ 0.8	28.4 @ 0.5	13.2 @ 1.0
PT-18030	18	30 @ 0.6	36.0 @ 0.4	17.0 @ 0.8
PT-18036	18	36 @ 0.5	43.4 @ 0.3	20.7 @ 0.6
PT-18044	18	44 @ 0.4	53.4 @ 0.3	25.7 @ 0.5
PT-36012	36	12 @ 2.9	13.4 @ 1.9	5.7 @ 3.7
PT-36018	36	18 @ 1.9	20.8 @ 1.2	9.4 @ 2.5
PT-36024	36	24 @ 1.5	28.6 @ 0.9	13.3 @ 1.9
PT-36030	36	30 @ 1.2	36.4 @ 0.7	17.2 @ 1.5
PT-36036	36	36 @ 1.0	44.0 @ 0.6	21.0 @ 1.2
PT-36044	36	44 @ 0.8	54.2 @ 0.5	26.1 @ 1.0
PT-60012	60	12 @ 5.0	13.6 @ 3.2	5.8 @ 5.9
PT-60018	60	18 @ 3.3	21.4 @ 2.1	9.7 @ 3.9
PT-60024	60	24 @ 2.5	29.0 @ 1.6	13.5 @ 3.0
PT-60030	60	30 @ 2.0	36.8 @ 1.3	17.4 @ 2.4
PT-60036	60	36 @ 1.7	44.6 @ 1.1	21.3 @ 2.0
PT-60044	60	44 @ 1.4	55 @ 0.9	26.5 @ 1.7
PT-60048	60	48 @ 1.3	60.2 @ 0.8	29.1 @ 1.5
PT-100018	100	18 @ 5.6	21.4 @ 3.2	9.7 @ 6.4
PT-100024	100	24 @ 4.2	29.4 @ 2.4	13.7 @ 4.8
PT-100030	100	30 @ 3.3	37.4 @ 1.9	17.7 @ 3.8
PT-100036	100	36 @ 2.8	45.0 @ 1.7	21.5 @ 3.3
PT-100044	100	44 @ 2.3	55.2 @ 1.4	26.6 @ 2.7
PT-100048	100	48 @ 2.1	60.8 @ 1.2	29.4 @ 2.4
PT-100056	100	56 @ 1.8	71.2 @ 1.1	34.6 @ 2.1
PT-100060	100	60 @ 1.7	76.6 @ 1.0	37.3 @ 1.9
PT-155024	155	24 @ 6.5	30.0 @ 3.5	14.0 @ 7.0
PT-155032	155	30 @ 5.2	37.6 @ 3.3	17.8 @ 6.1
PT-155036	155	36 @ 4.3	46.0 @ 2.3	22.0 @ 4.5
PT-155044	155	44 @ 3.5	56.2 @ 1.9	27.1 @ 3.7
PT-155048	155	48 @ 3.2	61.2 @ 1.7	29.6 @ 3.4
PT-155056	155	56 @ 2.8	72.0 @ 1.6	35.0 @ 3.1
PT-155060	155	60 @ 2.6	77.2 @ 1.4	37.6 @ 2.8
PT-200024	200	24 @ 8.3	29.6 @ 4.5	13.8 @ 9.0
PT-200030	200	30 @ 6.7	37.6 @ 3.7	17.8 @ 7.3
PT-200036	200	36 @ 5.5	45.8 @ 3.0	21.9 @ 6.0
PT-200044	200	44 @ 4.5	56.5 @ 2.5	27.3 @ 4.9
PT-200048	200	48 @ 4.2	61.4 @ 2.3	29.7 @ 4.6
PT-200056	200	56 @ 3.6	72.4 @ 1.9	35.2 @ 3.8
PT-200060	200	60 @ 3.3	77.2 @ 1.8	37.6 @ 3.5

PART NUMBER	Power (VA)	AC Output Series V @ I	DC Output	
			Series V @ I	Parallel V @ I
PT-325030	325	30 @ 10.8	38.2 @ 5.7	18.1 @ 11.4
PT-325036	325	36 @ 9.0	46.0 @ 4.6	22.0 @ 9.2
PT-325048	325	48 @ 6.8	62.0 @ 3.6	30.0 @ 7.1
PT-325060	325	60 @ 5.4	78.0 @ 2.9	38.0 @ 5.8
PT-325076	325	76 @ 4.3	99.6 @ 2.2	48.8 @ 4.5
PT-440036	440	36 @ 12.2	46.0 @ 6.1	22.0 @ 12.3
PT-440048	440	48 @ 9.2	62.2 @ 4.6	30.1 @ 9.2
PT-440060	440	60 @ 7.3	78.6 @ 3.7	38.3 @ 7.3
PT-440076	440	76 @ 5.8	100 @ 3.0	49.0 @ 5.8
PT-585048	585	48 @ 12.2	62.6 @ 6.0	30.3 @ 11.8
PT-585060	585	60 @ 9.7	78.6 @ 5.0	38.3 @ 9.8
PT-585076	585	76 @ 7.7	100 @ 3.8	49.2 @ 7.7
PT-690048	690	48 @ 14.4	63.0 @ 7.0	30.5 @ 14.0
PT-690060	690	60 @ 11.5	79.0 @ 5.5	38.5 @ 11.0
PT-690066	690	66 @ 11.5	87.4 @ 5.1	42.7 @ 10.2
PT-690076	690	76 @ 9.1	100.8 @ 4.3	49.4 @ 8.6

1.00 WATT MINI-SIP DC/DC CONVERTERS

1000 Vdc Isolation

FEATURES

- ① 1 Watt Output
- ② Up to 80% Efficiency
- ③ Momentary Short Circuit Protection
- ④ Miniature SIP Package

GENERAL SPECIFICATIONS

- Efficiency 75% Typ.
- Switching Frequency 100kHz Typ.
- Isolation Voltage 1000Vdc min.
- Operating Temperature -25°C to +80°C

INPUT SPECIFICATIONS

- Voltage Per Table Vdc
- Voltage Range $\pm 5\%$
- Input Filter Cap

OUTPUT SPECIFICATIONS

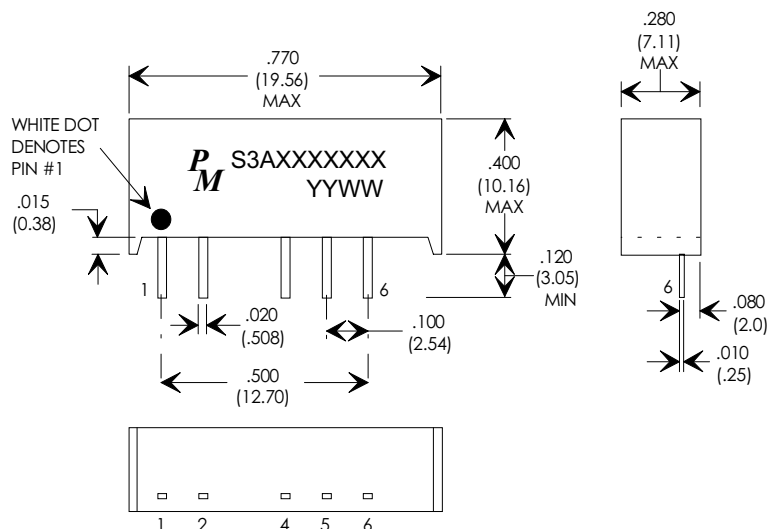
- Voltage Per Table
- Voltage Accuracy $\pm 5\%$
- Ripple & Noise 20MHz BW 1% p-p
- Load Regulation $\pm 10\%$

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO 80°C

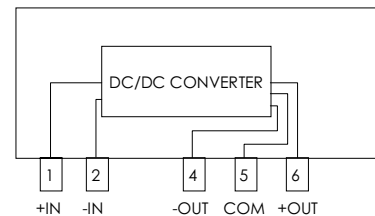
PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S3AS050520	5	5	200
S3AD050510	5	± 5	± 100
S3AS051208	5	12	84
S3AD051204	5	± 12	± 42
S3AS051507	5	15	66
S3AD051503	5	± 15	± 33
S3AS120520	12	5	200
S3AD120510	12	± 5	± 100
S3AS121208	12	12	84
S3AD121204	12	± 12	± 42

PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S3AS121507	12	15	66
S3AD121503	12	± 15	± 33
S3AS151507	15	15	66
S3AD151503	15	± 15	± 33
S3AS240520	24	5	200
S3AD240510	24	± 5	± 100
S3AS241208	24	12	84
S3AD241204	24	± 12	± 42
S3AS241507	24	15	66
S3AD241503	24	± 15	± 33

"S3A" PACKAGE



SCHEMATIC



PIN NUMBER	DUAL OUTPUT	SINGLE OUTPUT
1	+INPUT	+INPUT
2	-INPUT	-INPUT
3	OMITTED	OMITTED
4	-Vout	N.C.
5	0 Vout	-Vout
6	+Vout	+Vout

Specifications subject to change without notice.

s3_1watt 10/97

1.00 WATT MINI-SIP DC/DC CONVERTERS

3K Vdc Isolation

FEATURES

- ① 1 Watt Output
- ② Up to 80% Efficiency
- ③ Momentary Short Circuit Protection
- ④ Miniature SIP Package

GENERAL SPECIFICATIONS

- Efficiency 70% Typ.
- Switching Frequency 90 KHz Typ.
- Isolation Voltage 3000Vdc min.
- Operating Temperature -25°C to +80°C

INPUT SPECIFICATIONS

- Voltage Per Table Vdc
- Voltage Range $\pm 10\%$
- Input Filter Cap

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Voltage Accuracy $\pm 5\%$
- Ripple & Noise 20MHz BW 1% p-p
- Load Regulation $\pm 10\%$

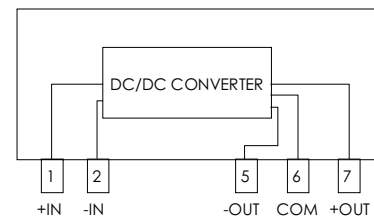
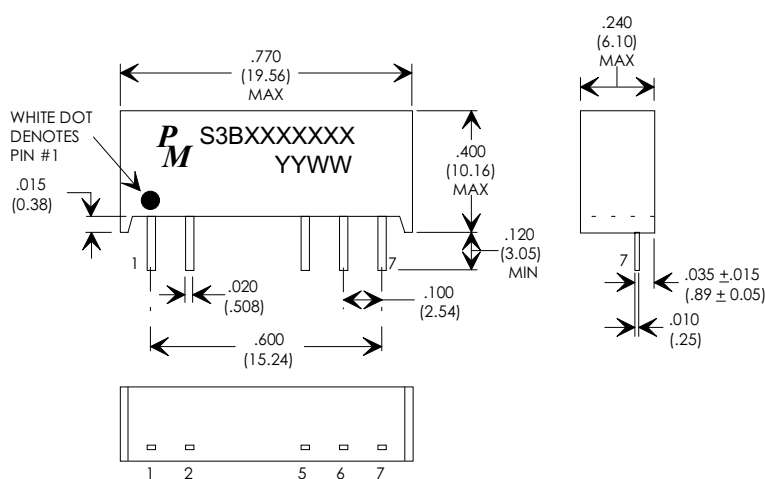
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO 80°C

PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S3BS050520	5	5	200
S3BD050510	5	± 5	± 100
S3BS051208	5	12	84
S3BD051204	5	± 12	± 42
S3BS051507	5	15	66
S3BD051503	5	± 15	± 33
S3BS120520	12	5	200
S3BD120510	12	± 5	± 100
S3BS121208	12	12	84

PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S3BD121204	12	± 12	± 42
S3BS121507	12	15	66
S3BD121503	12	± 15	± 33
S3BS240520	24	5	200
S3BD240510	24	± 5	± 100
S3BS241208	24	12	84
S3BD241204	24	± 12	± 42
S3BS241507	24	15	66
S3BD241503	24	± 15	± 33

"S3B" PACKAGE

SCHEMATIC



PIN NUMBER	DUAL OUTPUT	SINGLE OUTPUT
1	+INPUT	+INPUT
2	-INPUT	-INPUT
3	OMITTED	OMITTED
4	OMITTED	OMITTED
5	-Vout	-Vout
6	COMMON	N.C.
7	+Vout	+Vout

2.00 WATT MINI-SIP DC/DC CONVERTERS

500Vdc Isolation

FEATURES

- ① 2 Watt Output
- ② Up to 80% Efficiency
- ③ Momentary Short Circuit Protection
- ④ 6-Pin SIP Package

GENERAL SPECIFICATIONS

- Efficiency 70% Typ.
- Switching Frequency 50KHz min.
- Isolation Voltage 500Vdc min.
- Operating Temperature 0°C to +70°C

INPUT SPECIFICATIONS

- Voltage Per Table Vdc
- Voltage Range $\pm 10\%$
- Input Filter Cap

OUTPUT SPECIFICATIONS

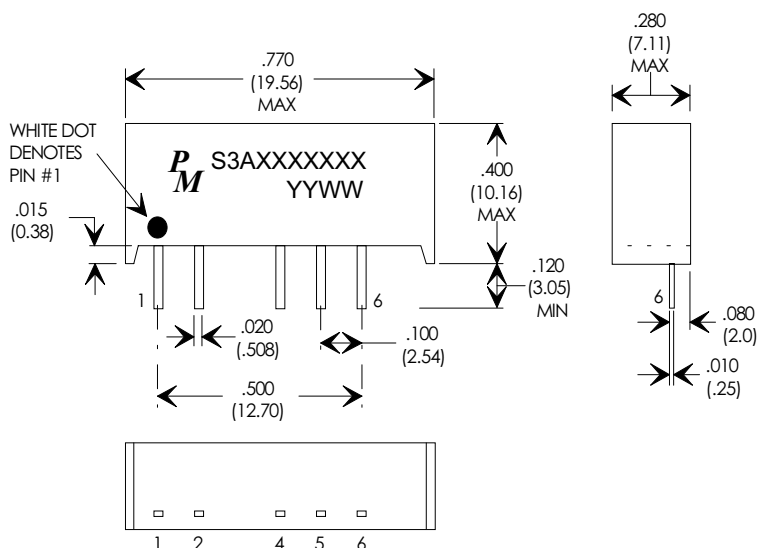
- Voltage Per Table
- Voltage Accuracy $\pm 5\%$
- Ripple & Noise 20MHz BW 150mV p-p
- Line Regulation..... 1.2%/1% of Vin
- Load Regulation $\pm 10\%$

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

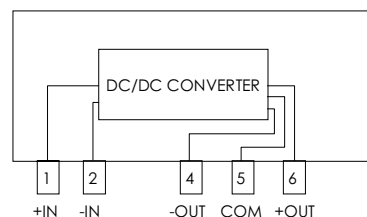
PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S3AS051217	5	12	170
S3AD050520	5	± 5	± 200
S3AD051208	5	± 12	± 85
S3AD051506	5	± 15	± 65
S3AD120520	12	± 5	± 200
S3AS120540	12	5	400
S3AD121208	12	± 12	± 85
S3AD121506	12	± 15	± 65

PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S3AD240520	24	± 5	± 200
S3AD241208	24	± 12	± 85
S3AD241506	24	± 15	± 65

"S3" PACKAGE



SCHEMATIC



PIN NUMBER	DUAL OUTPUT	SINGLE OUTPUT
1	+INPUT	+INPUT
2	-INPUT	-INPUT
3	OMITTED	OMITTED
4	-Vout	N.C.
5	0 Vout	-Vout
6	+Vout	+Vout

Specifications subject to change without notice.

s3_2watt 10/97

2.00 WATT MINI-SIP DC/DC CONVERTERS

1000Vdc Isolation

FEATURES

- ① 2 Watt Output
- ② Up to 80% Efficiency
- ③ Momentary Short Circuit Protection
- ④ 6-Pin SIP Package

GENERAL SPECIFICATIONS

- Efficiency 70% Typ.
- Switching Frequency 50KHz min.
- Isolation Voltage 1000Vdc min.
- Operating Temperature 0°C to +70°C

INPUT SPECIFICATIONS

- Voltage Per Table Vdc
- Voltage Range $\pm 10\%$
- Input Filter Cap

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Voltage Accuracy $\pm 5\%$
- Ripple & Noise 20MHz BW 150mV p-p
- Line Regulation 1.2%/1% of Vin
- Load Regulation $\pm 10\%$

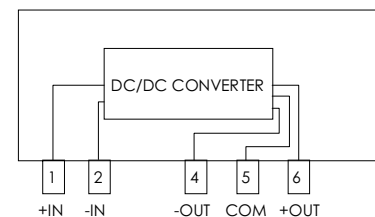
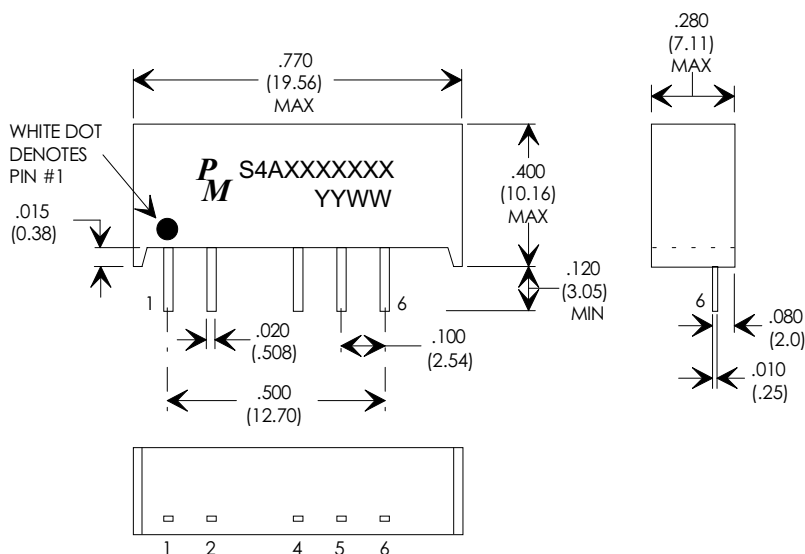
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S4AD050520	5	± 5	± 200
S4AS050922	5	9	220
S4AD051208	5	± 12	± 85
S4AD051506	5	± 15	± 65
S4AD120520	12	± 5	± 200
S4AD121208	12	± 12	± 85
S4AD121506	12	± 15	± 65

PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)
S4AD240520	24	± 5	± 200
S4AD241208	24	± 12	± 85
S4AD241506	24	± 15	± 65
S4AS241512	24	15 $\pm$	130

"S4" PACKAGE

SCHEMATIC



PIN NUMBER	DUAL OUTPUT	SINGLE OUTPUT
1	+INPUT	+INPUT
2	-INPUT	-INPUT
3	OMITTED	OMITTED
4	-Vout	N.C.
5	0 Vout	-Vout
6	+Vout	+Vout

Specifications subject to change without notice.

s4ax 10/97



1.5 & 3.0 WATT 24 PIN DIL DC/DC CONVERTERS

500Vdc Isolation

FEATURES

- 1 1.5 & 3.0 Watt Output
- 2 500Vdc Isolation
- 3 Momentary Short Circuit Protection
- 4 24-Pin DIL Package

GENERAL SPECIFICATIONS

- Efficiency50% to 70%
- Switching Frequency 25KHz min.
- Isolation Voltage 500Vdc min.
- Operating Temperature -20°C to +70°C
- Storage Temperature..... -55°C to +105°C

INPUT SPECIFICATIONS

- Voltage Per Table Vdc
- Voltage Range $\pm 10\%$
- Input Filter Pi Network

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Voltage Accuracy $\pm 3\%$
- Ripple & Noise 20MHz BW 0.5-1%Vp-p
- Line & Load Regulation $\pm 0.05\%$
- Voltage Stability(24HR) $\pm 0.05\%$

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -20°C TO +70°C

1.5 WATT DC/DC CONVERTERS DUAL & SINGLE OUTPUTS REGULATED

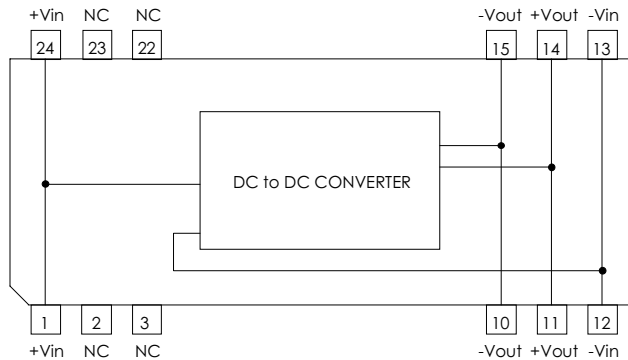
PART NUMBER	INPUT VOLTAGE (Vdc $\pm 10\%$)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	FULL LOAD INPUT (mA typ.)
B3AS050530	5.0	5	300	540
B3AS051212	5.0	12	125	450
B3AS051510	5.0	15	100	440
B3AD051212	5.0	± 12	± 60	450
B3AD051510	5.0	± 15	± 50	440
B3AS120530	12.0	5	300	195
B3AS121212	12.0	12	125	190
B3AS121510	12.0	15	100	190
B3AD121212	12.0	± 12	± 60	190
B3AD121510	12.0	± 15	± 50	190
B3AS240530	24.0	5	300	95
B3AS241212	24.0	12	125	90
B3AS241510	24.0	15	100	90
B3AD241212	24.0	± 12	± 60	90
B3AD241510	24.0	± 15	± 50	90
B3AS280530	28.0	5	300	95
B3AS281212	28.0	12	125	90
B3AS281510	28.0	15	100	90
B3AD281212	28.0	± 12	± 60	90
B3AD281510	28.0	± 15	± 50	90
B3AS480530	48.0	5	300	52
B3AS481212	48.0	12	125	47
B3AS481510	48.0	15	100	47
B3AD481212	48.0	± 12	± 60	47
B3AD481510	48.0	± 15	± 50	47

3.0 WATT DC/DC CONVERTERS DUAL & SINGLE OUTPUTS REGULATED

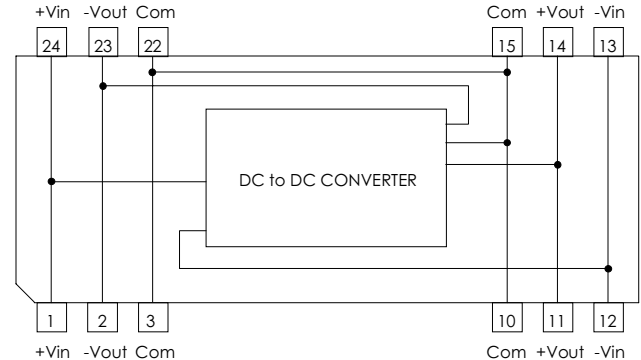
PART NUMBER	INPUT VOLTAGE (Vdc $\pm 10\%$)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	FULL LOAD INPUT (mA typ.)
B3AS050550	5.0	5	500	540
B3AS051225	5.0	12	250	450
B3AS051520	5.0	15	200	440
B3AD051225	5.0	± 12	± 125	450
B3AD051520	5.0	± 15	± 100	440
B3AS120550	12.0	5	500	195
B3AS121225	12.0	12	250	190
B3AS121520	12.0	15	200	190
B3AD121225	12.0	± 12	± 125	190
B3AD121520	12.0	± 15	± 100	190
B3AS240550	24.0	5	500	95
B3AS241225	24.0	12	250	90
B3AS241520	24.0	15	200	90
B3AD241225	24.0	± 12	± 125	90
B3AD241520	24.0	± 15	± 100	90
B3AS280550	28.0	5	500	95
B3AS281225	28.0	12	250	90
B3AS281520	28.0	15	200	90
B3AD281225	28.0	± 12	± 125	90
B3AD281520	28.0	± 15	± 100	90
B3AS480550	48.0	5	500	52
B3AS481225	48.0	12	250	47
B3AS481520	48.0	15	200	47
B3AD480560	48.0	± 5	± 300	52
B3AD481225	48.0	± 12	± 125	47
B3AD481520	48.0	± 15	± 100	47

1.5 & 3.0 WATT 24 PIN DIL DC/DC CONVERTERS

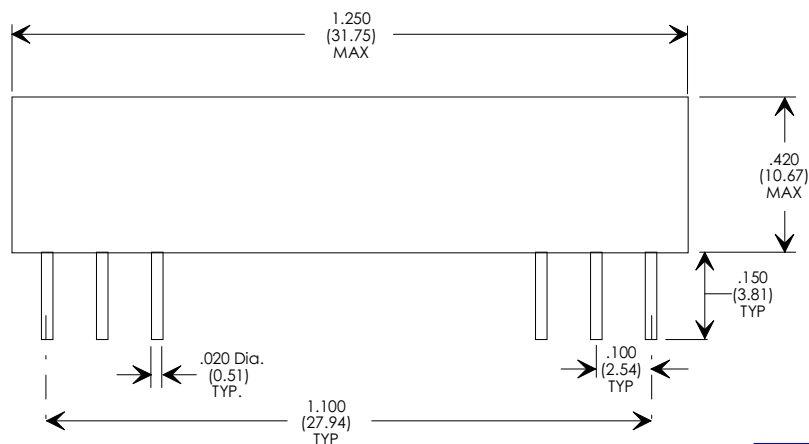
SCHEMATIC (SINGLE)



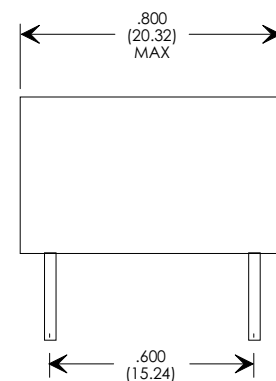
SCHEMATIC (DUAL)



B3 PACKAGE



PIN ASSIGNMENTS



PIN NUMBER	SINGLE OUTPUT	DUAL OUTPUT
1	+INPUT	+INPUT
2	NC	-OUTPUT
3	NC	COMMON
10	-OUTPUT	COMMON
11	+OUTPUT	+OUTPUT
12	-INPUT	-INPUT
13	-INPUT	-INPUT
14	+OUTPUT	+OUTPUT
15	-OUTPUT	COMMON
22	NC	COMMON
23	NC	-OUTPUT
24	+INPUT	+INPUT



1.0 & 2.25 WATT 24 PIN DIL DC/DC CONVERTERS

500Vdc Isolation

FEATURES

- ① 1.0 & 2.25 Watt Output
- ② Regulated & Unregulated Models
- ③ Short Circuit Protection
- ④ 24-Pin DIL Package

GENERAL SPECIFICATIONS

- Efficiency (unregulated)..... 70%
- Efficiency (regulated)..... 50%
- Switching Frequency 20KHz min.
- Isolation Voltage 500Vdc min.
- Operating Temperature 0°C to +70°C

INPUT SPECIFICATIONS

- Voltage Per Table Vdc
- Voltage Range $\pm 10\%$
- Input Filter Pi Network

OUTPUT SPECIFICATIONS

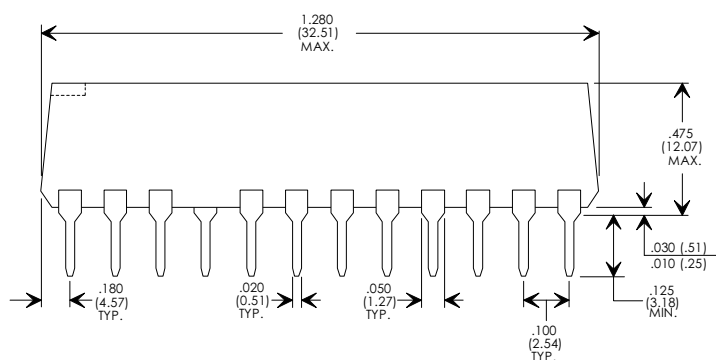
- Voltage 9.0 Vdc
- Voltage Accuracy $\pm 5\%$
- Ripple & Noise 20MHz BW 100mVp-p
- Load Regulation (unregulated)..... $\pm 6\%$
- Load Regulation (regulated)..... $\pm 5\%$

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO +70°C

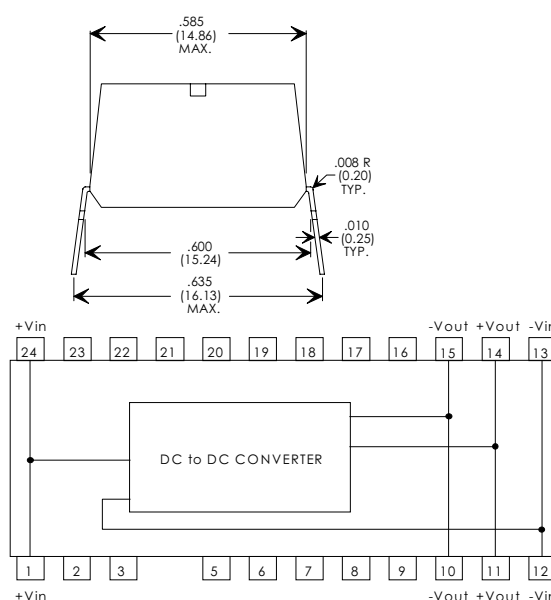
PART NUMBER	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	REGULATED OUTPUT	INPUT CURRENT (mA typ.)	
					NO LOAD	FULL LOAD
B2AU050920	5	9	200	NO	100	575
B2AU050921 (*)	5	9	200	NO	100	575
B2AU050925	5	9	250	NO	100	625
B2AU050926 (*)	5	9	250	NO	100	625
B2AU120920	12	9	200	NO	40	200
B2AU120925	12	9	250	NO	40	250
B2AR050920	5	9	200	YES	120	720
B2AR050925	5	9	250	YES	120	750
B2AR120920	12	9	200	YES	50	320
B2AR120925	12	9	250	YES	50	350

NOTE: (*) B2AU050921: MAY USE B2AU050920 AND REMOVE PIN #2-9, 16-23.
B2AU050926: MAY USE B2AU050925 AND REMOVE PIN #2-9, 16-23.

PACKAGE



SCHEMATIC



Specifications subject to change without notice.

B2AX 08/08/03

2.2 WATT 2:1 WIDE INPUT RANGE DC/DC POWER MODULES

FEATURES

- ❶ 2.2 Watt Isolated Output
- ❷ 2:1 Wide Input Range
- ❸ High Conversion Efficiency
- ❹ Continuous Short Circuit Protection
- ❺ Regulate Output

GENERAL SPECIFICATIONS

- Efficiency Per Table
- Operating Frequency 100KHz Typ.
- Isolation Voltage: 1000 Vdc Min.
- Operating Temperature -40 to +85°C
- Case Material:
1000Vdc.....Non-Conductive Black Plastic

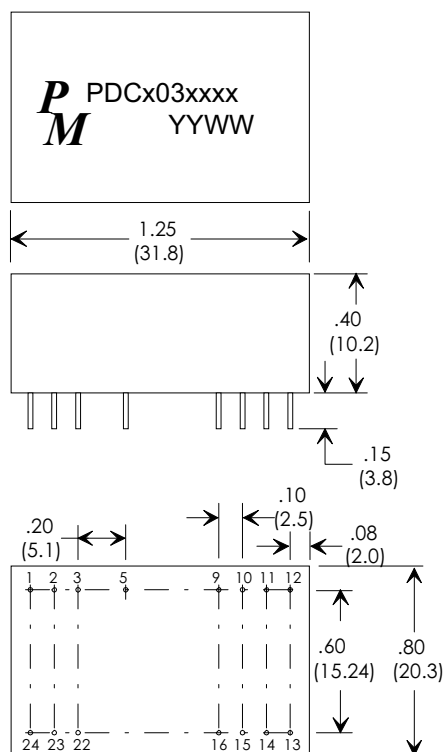
INPUT SPECIFICATIONS

- Voltage 5, 12, 24, 48 Vdc
- Voltage Range ...4.5-9, 9-18, 18-36, 36-72Vdc
- Input Filter Pi Type

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Initial Voltage Accuracy ±2% Max
- Voltage Stability ±0.05% max
- Ripple & Noise 20MHz BW 50mV p-p
- Load Regulation (10 to 100% Load)
Single Output Units: ±0.5%
Dual Output Units: ±1.0%
- Line Regulation ±0.3% Typ.

PACKAGE



PIN ASSIGNMENTS

1000VDC			2000VDC & 4000VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS	PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+ INPUT	+INPUT	1	NP	NP
2	NC	- OUTPUT	2	- INPUT	- INPUT
3	NC	COMMON	3	- INPUT	- INPUT
5	NP	NP	5	NP	NP
9	NP	NP	9	NC	COMMON
10	- OUTPUT	COMMON	10	NC	NC
11	+ OUTPUT	+ OUTPUT	11	NC	- OUTPUT
12	- INPUT	- INPUT	12	NP	NP
13	- INPUT	- INPUT	13	NP	NP
14	+ OUTPUT	+ OUTPUT	14	+ OUTPUT	+ OUTPUT
15	- OUTPUT	COMON	15	NC	NC
16	NP	NP	16	- OUTPUT	COMMON
22	NC	COMMON	22	+ INPUT	+ INPUT
23	NC	- OUTPUT	23	+ INPUT	+ INPUT
24	+ INPUT	+ INPUT	24	NP	NP

NP* - NO PIN
NC* - NO CONNECTION WITH PIN



2.2 WATT 2:1WIDE INPUT RANGE DC/DC POWER MODULES

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +80°C

PART NUMBER (SINGLE OUTPUT)	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	%EFF
PDCS03071	5	3.3	600	70
PDCS03072	5	5	440	72
PDCS03073	5	9	244	74
PDCS03074	5	12	183	77
PDCS03075	5	15	147	78
PDCS03076	12	3.3	600	74
PDCS03077	12	5	440	78
PDCS03078	12	9	244	81
PDCS03079	12	12	183	83
PDCS03080	12	15	147	84
PDCS03081	24	3.3	600	76
PDCS03082	24	5	440	79
PDCS03083	24	9	244	82
PDCS03084	24	12	183	84
PDCS03085	24	15	147	85
PDCS03086	48	3.3	600	78
PDCS03087	48	5	440	80
PDCS03088	48	9	244	83
PDCS03089	48	12	183	85
PDCS03090	48	15	147	85

PART NUMBER (DUAL OUTPUT)	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	%EFF
PDCD03072	5	±5	±220	70
PDCD03073	5	±9	±122	72
PDCD03074	5	±12	±92	74
PDCD03075	5	±15	±74	78
PDCD03077	12	±5	±220	78
PDCD03078	12	±9	±122	81
PDCD03079	12	±12	±92	83
PDCD03080	12	±15	±74	84
PDCD03082	24	±5	±220	79
PDCD03083	24	±9	±122	82
PDCD03084	24	±12	±92	84
PDCD03085	24	±15	±74	85
PDCD03087	48	±5	±220	80
PDCD03088	48	±9	±122	83
PDCD03089	48	±12	±92	85
PDCD03090	48	±15	±74	85

NOTE #1:

PDCx030xx_ : BLANK FOR STANDARD PART WITH ISOLATION = 1000VDC

PDCx030xxN : ADD "N" FOR PART WITH ISOLATION = 2000VDC

PDCx030xxS : ADD "S" FOR PART WITH ISOLATION = 4000VDC

3.0 WATT 2:1WIDE INPUT RANGE DC/DC POWER MODULES

FEATURES

- ❶ 3.0 Watt Isolated Output
- ❷ 2:1 Wide Input Range
- ❸ High Conversion Efficiency
- ❹ Continuous Short Circuit Protection
- ❺ Regulate Output

GENERAL SPECIFICATIONS

- Efficiency Per Table
- Switching Frequency 100KHz Min.
- Isolation Voltage: 500 Vdc Min.
- Operating Temperature -25 °C to +71 °C
Derate Linear to No Load @ 100 °C Max.
- Case Material:
500Vdc.....Non-Conductive Black Plastic
1.5kVdc & 3kVdc.....Black Coated Copper
With Non-Conductive Base

INPUT SPECIFICATIONS

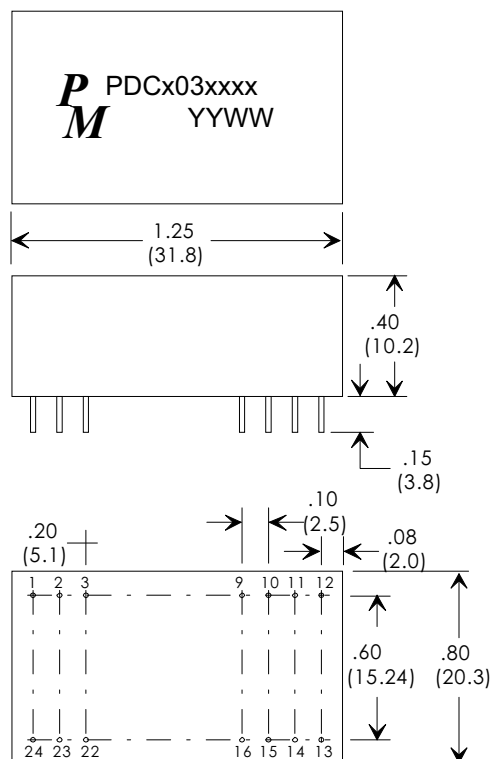
- Voltage 5, 12, 24, 48 Vdc
- Voltage Range ...4.5-6, 9-18, 18-36, 36-72Vdc
- Input Filter Pi Type

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Initial Voltage Accuracy ±2% Max
- Voltage Stability ±0.05% max
- Ripple & Noise 100/150mV p-p
- Load Regulation (10 to 100% Load)
Single Output Units: ±0.5%
Dual Output Units: ±1.0%
- Line Regulation ±0.5% typ.
- Temp Coefficient ±0.05% /°C
- Short Circuit Protection Continuous

PACKAGE

PIN ASSIGNMENTS



500VDC			1500VDC & 3000VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS	PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+ INPUT	+INPUT	1	NP	NP
2	NC	- OUTPUT	2	- INPUT	- INPUT
3	NC	COMMON	3	- INPUT	- INPUT
9	NP	NP	9	NC	COMMON
10	- OUTPUT	COMMON	10	NC	NC
11	+ OUTPUT	+ OUTPUT	11	NC	- OUTPUT
12	- INPUT	- INPUT	12	NP	NP
13	- INPUT	- INPUT	13	NP	NP
14	+ OUTPUT	+ OUTPUT	14	+ OUTPUT	+ OUTPUT
15	- OUTPUT	COMON	15	NC	NC
16	NP	NP	16	- OUTPUT	COMMON
22	NC	COMMON	22	+ INPUT	+ INPUT
23	NC	- OUTPUT	23	+ INPUT	+ INPUT
24	+ INPUT	+ INPUT	24	NP	NP

NP* - NO PIN
NC* - NO CONNECTION WITH PIN



3.0 WATT 2:1 WIDE INPUT RANGE DC/DC POWER MODULES

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +75°C

PART NUMBER	INPUT VOLTAGE		OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mAdc)	INPUT CURRENT		TYPICAL EFFICIENCY
	NOMINAL	RANGE			NO LOAD mA	FULL LOAD mA	
PDCS03001	5	4.5-6.0	3.3	600	15	650	61 %
PDCS03002	5	4.5-6.0	5	600	15	850	70 %
PDCS03003	5	4.5-6.0	12	250	15	800	75 %
PDCS03004	5	4.5-6.0	15	200	15	800	75 %
PDCD03002	5	4.5-6.0	±5	±300	25	850	70 %
PDCD03003	5	4.5-6.0	±12	±125	25	800	75 %
PDCD03004	5	4.5-6.0	±15	±100	25	800	75 %
PDCS03005	12	9-18	3.3	600	7.5	254	65 %
PDCS03006	12	9-18	5	600	7.5	340	73 %
PDCS03007	12	9-18	12	250	7.5	320	78 %
PDCS03008	12	9-18	15	200	7.5	320	78 %
PDCD03006	12	9-18	±5	±300	12	340	73 %
PDCD03007	12	9-18	±12	±125	12	320	78 %
PDCD03008	12	9-18	±15	±100	12	320	78 %
PDCS03009	24	18-36	3.3	600	5	125	66 %
PDCS03010	24	18-36	5	600	5	168	74 %
PDCS03011	24	18-36	12	250	5	156	80 %
PDCS03012	24	18-36	15	200	5	156	80 %
PDCD03010	24	18-36	±5	±300	7.5	168	74 %
PDCD03011	24	18-36	±12	±125	7.5	156	80 %
PDCD03012	24	18-36	±15	±100	7.5	156	80 %
PDCS03013	48	36-72	3.3	600	3	61	68 %
PDCS03014	48	36-72	5	600	2	82	76 %
PDCS03015	48	36-72	12	250	2	78	80 %
PDCS03016	48	36-72	15	200	2	78	80 %
PDCD03014	48	36-72	±5	±300	3	82	76 %
PDCD03015	48	36-72	±12	±125	3	80	78 %
PDCD03016	48	36-72	±15	±100	3	80	78 %

NOTE:

PDCx030xx : BLANK FOR STANDARD PART WITH ISOLATION = 500VDC

PDCx030xxK : ADD "K" FOR PART WITH ISOLATION = 1500VDC

PDCx030xxQ : ADD "Q" FOR PART WITH ISOLATION = 3000VDC

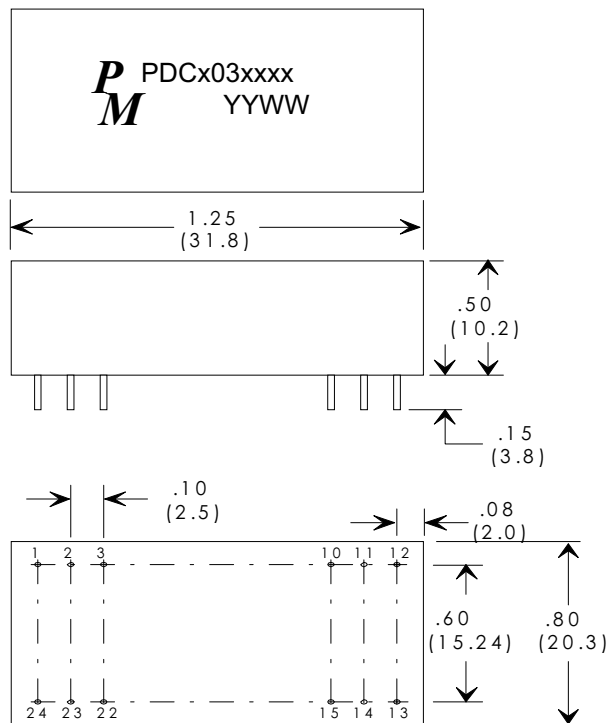
3.0 WATT 2:1WIDE INPUT RANGE DC/DC POWER MODULES

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +75°C

PART NUMBER	INPUT VOLTAGE		OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA dc)	INPUT CURRENT		TYPICAL EFFICIENCY
	NOMINAL	RANGE			NO LOAD mA	FULL LOAD mA	
PDCS03017	5	4.5-6.0	3.3	600	15	600	70 %
PDCS03018	5	4.5-6.0	5	600	15	850	70 %
PDCS03019	5	4.5-6.0	12	250	15	800	75 %
PDCS03020	5	4.5-6.0	15	200	15	800	75 %
PDCD03018	5	4.5-6.0	±5	±300	25	850	70 %
PDCD03019	5	4.5-6.0	±12	±125	25	800	75 %
PDCD03020	5	4.5-6.0	±15	±100	25	800	75 %

NOTE:

PDCx030xx_ : BLANK FOR STANDARD PART WITH ISOLATION = 500VDC



500VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+ INPUT	+INPUT
2	NC	+INPUT
3	NC	NC
10	NC	NC
11	- OUTPUT	COMMON
12	- OUTPUT	COMMON
13	NC	- OUTPUT
14	+ OUTPUT	NC
15	+ OUTPUT	+ OUTPUT
22	NC	NC
23	- INPUT	- INPUT
24	- INPUT	- INPUT

NC* - NO CONNECTION WITH PIN



3.0 WATT 2:1 WIDE INPUT RANGE DC/DC POWER MODULES

Extended Temperature

FEATURES

- ① 3.0 Watt Isolated Output
- ② 2:1 Wide Input Range
- ③ Continuous Short Circuit Protection
- ④ Extended Temperature

GENERAL SPECIFICATIONS

- Efficiency Per Table
- Operating Frequency 50KHz Min.
- Isolation Voltage: 500 Vdc Min.
- Operating Temperature -40°C to +80°C
- Efficiency Up to 80%

INPUT SPECIFICATIONS

- Voltage 5, 12, 24, 48 Vdc
- Voltage Range.. 4.5-9, 9-18, 18-36, 36-72Vdc
- Input Filter Pi Type

OUTPUT SPECIFICATIONS

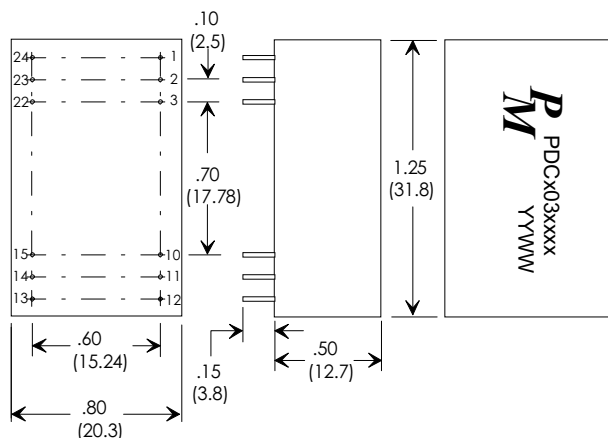
- Voltage Per Table
- Voltage Stability $\pm 0.05\%$ max
- Ripple & Noise $V_{out} = 5\sim 9V$ 100mV p-p
 $V_{out} = 12\sim 15V$ 1% of V_{out}
- Load Regulation $\pm 0.2\%$ typ.
- Line Regulation $\pm 0.1\%$ typ.

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -40°C TO +80°C

PART NUMBER (SINGLE OUTPUT)	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	%EFF
PDCS03051	5	5	600	65
PDCS03052	5	9	333	70
PDCS03053	5	12	250	72
PDCS03054	5	15	200	73
PDCS03056	12	5	600	66
PDCS03057	12	9	333	75
PDCS03058	12	12	250	77
PDCS03059	12	15	200	75
PDCS03061	24	5	600	78
PDCS03062	24	9	333	79
PDCS03063	24	12	250	80
PDCS03064	24	15	200	80
PDCS03066	48	5	600	72
PDCS03067	48	9	333	75
PDCS03068	48	12	250	76
PDCS03069	48	15	200	80

PART NUMBER (DUAL OUTPUT)	INPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA max.)	%EFF
PDCD03051	5	± 5	± 300	65
PDCD03052	5	± 9	± 167	70
PDCD03053	5	± 12	± 125	71
PDCD03054	5	± 15	± 100	72
PDCD03056	12	± 5	± 300	65
PDCD03057	12	± 9	± 167	74
PDCD03058	12	± 12	± 125	71
PDCD03059	12	± 15	± 100	75
PDCD03061	24	± 5	± 300	80
PDCD03062	24	± 9	± 167	75
PDCD03063	24	± 12	± 125	79
PDCD03064	24	± 15	± 100	80
PDCD03066	48	± 5	± 300	77
PDCD03067	48	± 9	± 167	75
PDCD03068	48	± 12	± 125	74
PDCD03069	48	± 15	± 100	76

PACKAGE



PIN ASSIGNMENTS

500 VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+INPUT	+INPUT
2	NP	- OUTPUT
3	NP	COMMON
10	-OUTPUT	COMMON
11	+OUTPUT	+OUTPUT
12	- INPUT	- INPUT
13	- INPUT	- INPUT
14	+OUTPUT	+OUTPUT
15	-OUTPUT	COMMON
22	NP	COMMON
23	NP	-OUTPUT
24	+INPUT	+INPUT

Specifications subject to change without notice.

*NP-NO PIN

*NC-NO CONNECTION WITH PIN

PDCx0305x 12/00

3.0 WATT 2:1 WIDE INPUT RANGE DC/DC POWER MODULES

With Remote On/Off Option

FEATURES

- ❶ 3.0 Watt Isolated Output
- ❷ 2:1 Wide Input Range
- ❸ High Conversion Efficiency
- ❹ Continuous Short Circuit Protection
- ❺ Remote ON/OFF Option

GENERAL SPECIFICATIONS

- Efficiency Per Table
- Switching Frequency 100KHz Min.
- Isolation Voltage: 500 Vdc Min.
- Operating Temperature -25°C to +75°C
Derate Linear to no load @ 100°C max.
- Case Material:
500Vdc.....Non-Conductive Black Plastic
1.5kVdc & 3kVdc.....Black Coated Copper
With Non-Conductive Base
- EMI/RFI.....Conductive EMI Meets
EN55022 Class B

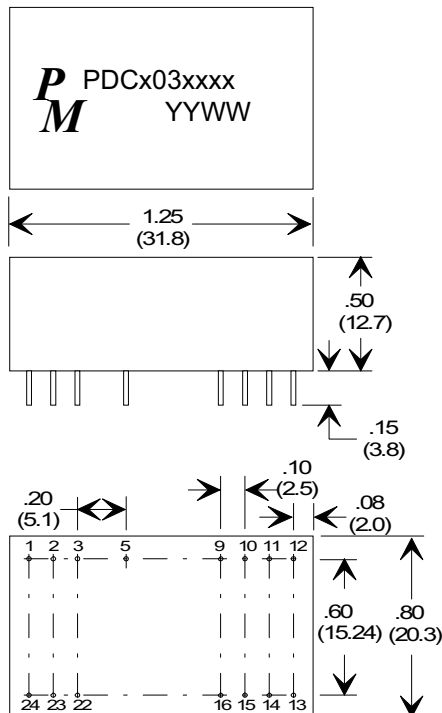
INPUT SPECIFICATIONS

- Voltage12, 24, 48 Vdc
- Voltage Range9-18, 18-36 & 36-72Vdc
- Input Filter Pi Type

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Initial Voltage Accuracy ±2% Max
- Voltage Stability ±0.05% max
- Ripple & Noise 100/150mV p-p
- Load Regulation (10 to 100% Load)
Single Output Units: ±0.5%
Dual Output Units: ±1.0%
- Line Regulation ±0.5% typ.
- Temp Coefficient ±0.05% /°C
- Short Circuit Protection Continuous

PACKAGE



PIN ASSIGNMENTS

REMOTE ON/OFF CONTROL

Logic	CMOS or Open Collector TTL
Ec-On	>+5.5VDC or Open Circuit
Ec-Off	<1.8VDC
Shutdown Idle Current	10mA
Input Resistance	100 Ohm
Control Common	Referenced to Input Minus

500VDC			1500VDC & 3000VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS	PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+ INPUT	+INPUT	1	NP	NP
2	NC	- OUTPUT	2	- INPUT	- INPUT
3	NC	COMMON	3	- INPUT	- INPUT
5	NP	NP	5	NP	R.ON/OFF
9	NP	NP	9	NC	COMMON
10	- OUTPUT	COMMON	10	NC	NC
11	+ OUTPUT	+ OUTPUT	11	NC	- OUTPUT
12	- INPUT	- INPUT	12	NP	NP
13	- INPUT	- INPUT	13	NP	NP
14	+ OUTPUT	+ OUTPUT	14	+ OUTPUT	+ OUTPUT
15	- OUTPUT	COMON	15	NC	NC
16	NP	NP	16	- OUTPUT	COMMON
22	NC	COMMON	22	+ INPUT	+ INPUT
23	NC	- OUTPUT	23	+ INPUT	+ INPUT
24	+ INPUT	+ INPUT	24	NP	NP



3.0 WATT 2:1 WIDE INPUT RANGE DC/DC POWER MODULES

With Remote On/Off Option

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +75°C

PART NUMBER (NOTE #1)	Previous Premier Magnetic Part # (NOTE #2)	INPUT VOLTAGE		OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mAdc)	INPUT CURRENT		TYPICAL EFFICIENCY
		NOMINAL	RANGE			NO LOAD mA	FULL LOAD mA	
PDCS03021	B5AS1203NX	12	9-18	3.3	600	7.5	226	73 %
PDCS03022	B5AS1205NX	12	9-18	5	600	7.5	340	73 %
PDCS03023	B5AS1212NX	12	9-18	12	250	7.5	320	78 %
PDCS03024	B5AS1215NX	12	9-18	15	200	7.5	330	76 %
PDCD03022	B5AD1205NX	12	9-18	±5	±300	12	340	73 %
PDCD03023	B5AD1212NX	12	9-18	±12	±125	12	330	76 %
PDCD03024	B5AD1215NX	12	9-18	±15	±100	12	330	75 %
PDCS03025	B5AS2403NX	24	18-36	3.3	600	5	113	73 %
PDCS03026	B5AS2405NX	24	18-36	5	600	5	168	74 %
PDCS03027	B5AS2412NX	24	18-36	12	250	5	156	80 %
PDCS03028	B5AS2415NX	24	18-36	15	200	5	156	80 %
PDCD03026	B5AD2405NX	24	18-36	±5	±300	7.5	168	74 %
PDCD03027	B5AD2412NX	24	18-36	±12	±125	7.5	156	80 %
PDCD03028	B5AD2415NX	24	18-36	±15	±100	7.5	160	80 %
PDCS03029	B5AS4803NX	48	36-72	3.3	600	3	55	76 %
PDCS03030	B5AS4805NX	48	36-72	5	600	2	82	76 %
PDCS03031	B5AS4812NX	48	36-72	12	250	2	82	77 %
PDCS03032	B5AS4815NX	48	36-72	15	200	2	82	77 %
PDCD03030	B5AD4805NX	48	36-72	±5	±300	3	82	76 %
PDCD03031	B5AD4812NX	48	36-72	±12	±125	3	82	76 %
PDCD03032	B5AD4815NX	48	36-72	±15	±100	3	82	76 %

NOTE #1:

PDCx030xx_ : BLANK FOR STANDARD PART WITH ISOLATION = 500VDC

PDCx030xxK : ADD "K" FOR PART WITH ISOLATION = 1500VDC

PDCx030xxQ : ADD "Q" FOR PART WITH ISOLATION = 3000VDC

PDCx030xxR : ADD "R" FOR PART WITH ISOLATION = 3000VDC AND REMOTE ON/OFF

NOTE #2: (FOR PREVIOUS PREMIER MAGNETICS PART #)

B5AXXXXXNX : FOR STANDARD PART WITH ISOLATION = 500VDC

B5AXXXXXNM : FOR PART WITH ISOLATION = 1500VDC

B5AXXXXXNT : FOR PART WITH ISOLATION = 3000VDC

B5AXXXXXYT : FOR PART WITH ISOLATION = 3000VDC AND REMOTE ON/OFF

3.0 WATT 4:1 WIDE INPUT RANGE DC/DC POWER MODULES

FEATURES

- ❶ 3.0 Watt Isolated Output
- ❷ 4:1 Wide Input Range
- ❸ High Conversion Efficiency
- ❹ Continuous Short Circuit Protection
- ❺ Regulate Output

GENERAL SPECIFICATIONS

- Efficiency Per Table
- Switching Frequency 100KHz Min.
- Isolation Voltage: 500 Vdc Min.
- Operating Temperature -25°C to +71°C
Derate Linear to No Load @ 100°C Max.
- Case Material:
500Vdc.....Non-Conductive Black Plastic
1.5kVdc & 3kVdc.....Black Coated Copper
With Non-Conductive Base

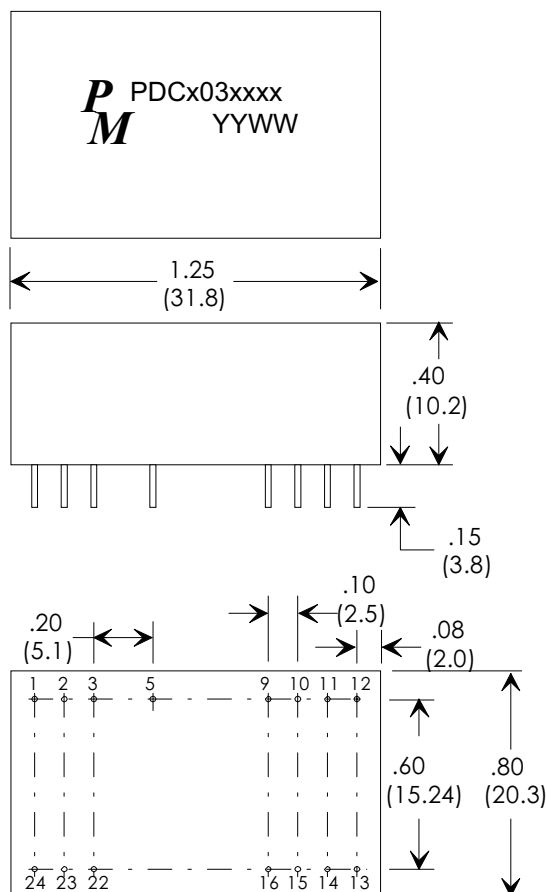
INPUT SPECIFICATIONS

- Voltage 24,48 Vdc
- Voltage Range 9-36,18-72Vdc
- Input Filter Pi Type

OUTPUT SPECIFICATIONS

- Voltage Per Table
- Initial Voltage Accuracy ±2% Max
- Voltage Stability ±0.05% max
- Ripple & Noise 100/150mV p-p
- Load Regulation (10 to 100% Load)
Single Output Units: ±0.5%
Dual Output Units: ±1.0%
- Line Regulation ±0.5% typ.
- Temp Coefficient ±0.05% /°C
- Short Circuit Protection Continuous

PACKAGE



PIN ASSIGNMENTS

500VDC			1500VDC & 3000VDC		
PIN #	SINGLE OUTPUT	DUAL OUTPUTS	PIN #	SINGLE OUTPUT	DUAL OUTPUTS
1	+ INPUT	+INPUT	1	NP	NP
2	NC	- OUTPUT	2	- INPUT	- INPUT
3	NC	COMMON	3	- INPUT	- INPUT
5	NP	NP	5	NP	NP
9	NP	NP	9	NC	COMMON
10	- OUTPUT	COMMON	10	NC	NC
11	+ OUTPUT	+ OUTPUT	11	NC	- OUTPUT
12	- INPUT	- INPUT	12	NP	NP
13	- INPUT	- INPUT	13	NP	NP
14	+ OUTPUT	+ OUTPUT	14	+ OUTPUT	+ OUTPUT
15	- OUTPUT	COMON	15	NC	NC
16	NP	NP	16	- OUTPUT	COMMON
22	NC	COMMON	22	+ INPUT	+ INPUT
23	NC	- OUTPUT	23	+ INPUT	+ INPUT
24	+ INPUT	+ INPUT	24	NP	NP

NP* - NO PIN
NC* - NO CONNECTION WITH PIN



3.0 WATT 4:1 WIDE INPUT RANGE DC/DC POWER MODULES

ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE -25°C TO +75°C

PART NUMBER	INPUT VOLTAGE		OUTPUT VOLTAGE (Vdc)	OUTPUT CURRENT (mA _{dc})	INPUT CURRENT		TYPICAL EFFICIENCY
	NOMINAL	RANGE			NO LOAD mA	FULL LOAD mA	
PDCS03041	24	9-36	3.3	600	15	117	70 %
PDCS03042	24	9-36	5	600	15	174	72 %
PDCS03043	24	9-36	12	250	15	165	76 %
PDCS03044	24	9-36	15	200	15	165	76 %
PDCD03042	24	9-36	±5	±300	25	179	70 %
PDCD03043	24	9-36	±12	±125	25	174	72 %
PDCD03044	24	9-36	±15	±100	25	174	72 %
PDCS03045	48	18-72	3.3	600	7.5	58	70 %
PDCS03046	48	18-72	5	600	7.5	87	72 %
PDCS03047	48	18-72	12	250	7.5	78	80 %
PDCS03048	48	18-72	15	200	7.5	78	80 %
PDCD03046	48	18-72	±5	±300	12	88	71 %
PDCD03047	48	18-72	±12	±125	12	87	72 %
PDCD03048	48	18-72	±15	±100	12	87	72 %

NOTE:

PDCx030xx_ : BLANK FOR STANDARD PART WITH ISOLATION = 500VDC

PDCx030xxK : ADD "K" FOR PART WITH ISOLATION = 1500VDC

PDCx030xxQ : ADD "Q" FOR PART WITH ISOLATION = 3000VDC

DC/DC POWER MODULES

1-4 AMP ADJUSTABLE

FEATURES

- Efficiency Up to 96% (ISR)
- ON/OFF Control (ground off)
- Adjustable Output Voltage
- Wide Input Range
- Overload Protection (125% full load typical)
- Continuous Short Circuit Protection
- Non-Isolation (No Hi Pot)



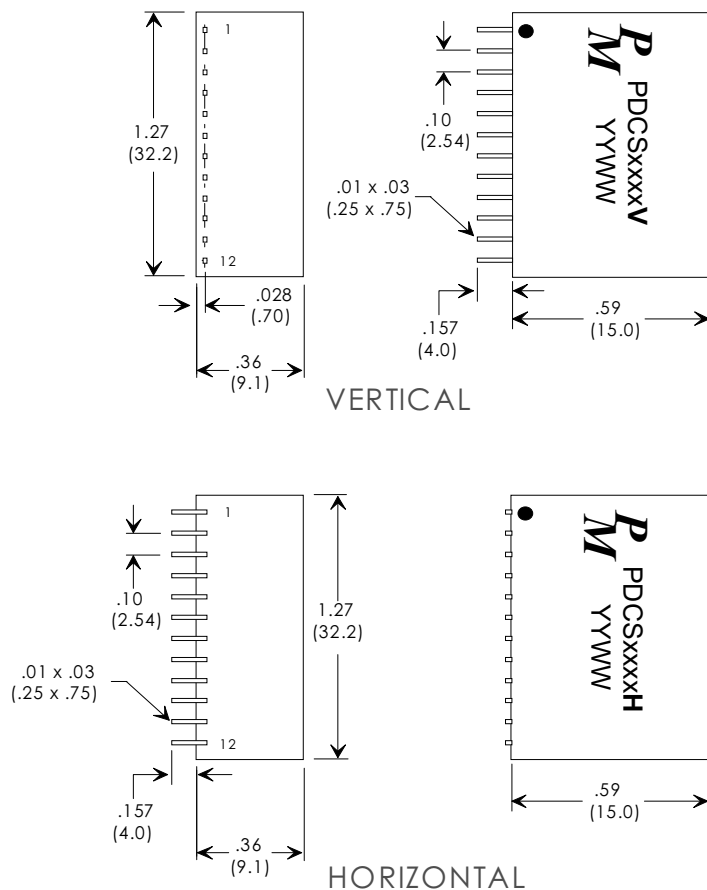
PART NUMBER	INPUT VOLTAGE RANGE (Vdc)	OUTPUT VOLTAGE (Vdc)	OUTPUT VOLTAGE ADJUST RANGE (Vdc)	OUTPUT CURRENT (A dc)	EFFICIENCY INPUT VOLTAGE		
					Min	12V	Max
PDCS5212 *	4.5 - 18	1.2	1.0 - 4.0	2.0	83%	79%	75%
PDCS5218 *	4.5 - 18	1.8	1.6 - 5.5	2.0	88%	85%	82%
PDCS5225 *	4.5 - 18	2.5	1.6 - 5.5	2.0	91%	88%	86%
PDCS5233 *	4.5 - 18	3.3	1.6 - 5.5	2.0	92%	90%	89%
PDCS5250 *	6.5 - 18	5.0	3.0 - 5.5	2.0	95%	93%	92%
PDCS5312 *	4.5 - 18	1.2	1.0 - 4.0	3.0	85%	84%	82%
PDCS5318 *	4.5 - 18	1.8	1.6 - 5.5	3.0	89%	88%	86%
PDCS5325 *	4.5 - 18	2.5	1.6 - 5.5	3.0	92%	91%	89%
PDCS5333 *	4.5 - 18	3.3	1.6 - 5.5	3.0	94%	93%	92%
PDCS5350 *	6.5 - 18	5.0	3.6 - 5.5	3.0	96%	95%	94%
PDCS5412 *	4.5 - 18	1.2	1.0 - 4.0	4.0	82%	81%	79%
PDCS5418 *	4.5 - 18	1.8	1.6 - 5.5	4.0	87%	86%	85%
PDCS5425 *	4.5 - 18	2.5	1.6 - 5.5	4.0	91%	89%	88%
PDCS5433 *	4.5 - 18	3.3	1.6 - 5.5	4.0	93%	92%	91%
PDCS5450 *	6.5 - 18	5.0	3.6 - 5.5	4.0	95%	94%	93%
PDCS6133 *	9 - 26	3.3	1.8 - 6.0	1.0	88%		81%
PDCS6150 *	9 - 38	5.0	1.8 - 11.0	1.0	92%		86%
PDCS6190 *	12 - 38	9.0	3.3 - 12.0	1.0	96%		89%
PDCS6112 *	15 - 38	12.0	5.0 - 18.0	1.0	97%		94%
PDCS6233 *	9 - 26	3.3	1.8 - 6.0	2.0	86%		82%
PDCS6250 *	9 - 38	5.0	1.8 - 11.0	2.0	90%		87%
PDCS6290 *	12 - 38	9.0	3.3 - 12.0	2.0	95%		92%
PDCS6212 *	15 - 38	12.0	5.0 - 18.0	2.0	96%		94%

* NOTE: ADD "V" FOR VERTICAL PACKAGE, "H" FOR HORIZONTAL PACKAGE

DC/DC POWER MODULES

1-4 AMP ADJUSTABLE

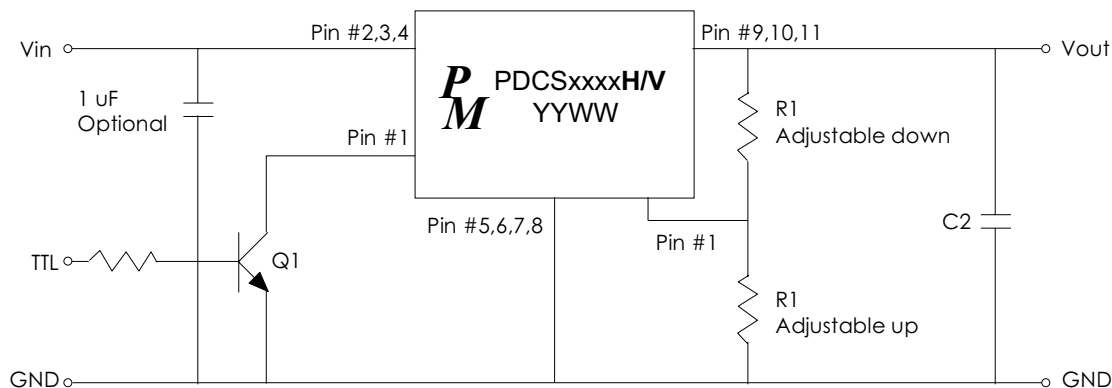
PACKAGE



PIN ASSIGNMENTS

PIN #	FUNCTION
1	INHIBIT (10V max)
2	Vin
3	Vin
4	Vin
5	GND
6	GND
7	GND
8	GND
9	Vout
10	Vout
11	Vout
12	Vout Adj

TYPICAL APPLICATION CIRCUIT



C2: 100uF ELECTROLYTIC OR TANTALUM OUTPUT CAPACITOR
Q1: TRANSISTOR OR MOSFET (Vce OR Vds > 25Vdc)

Specifications subject to change without notice.

The Right Stuff

DSL Magnetics
COM Magnetics
LAN Magnetics
POWER Magnetics
DC/DC Magnetics

