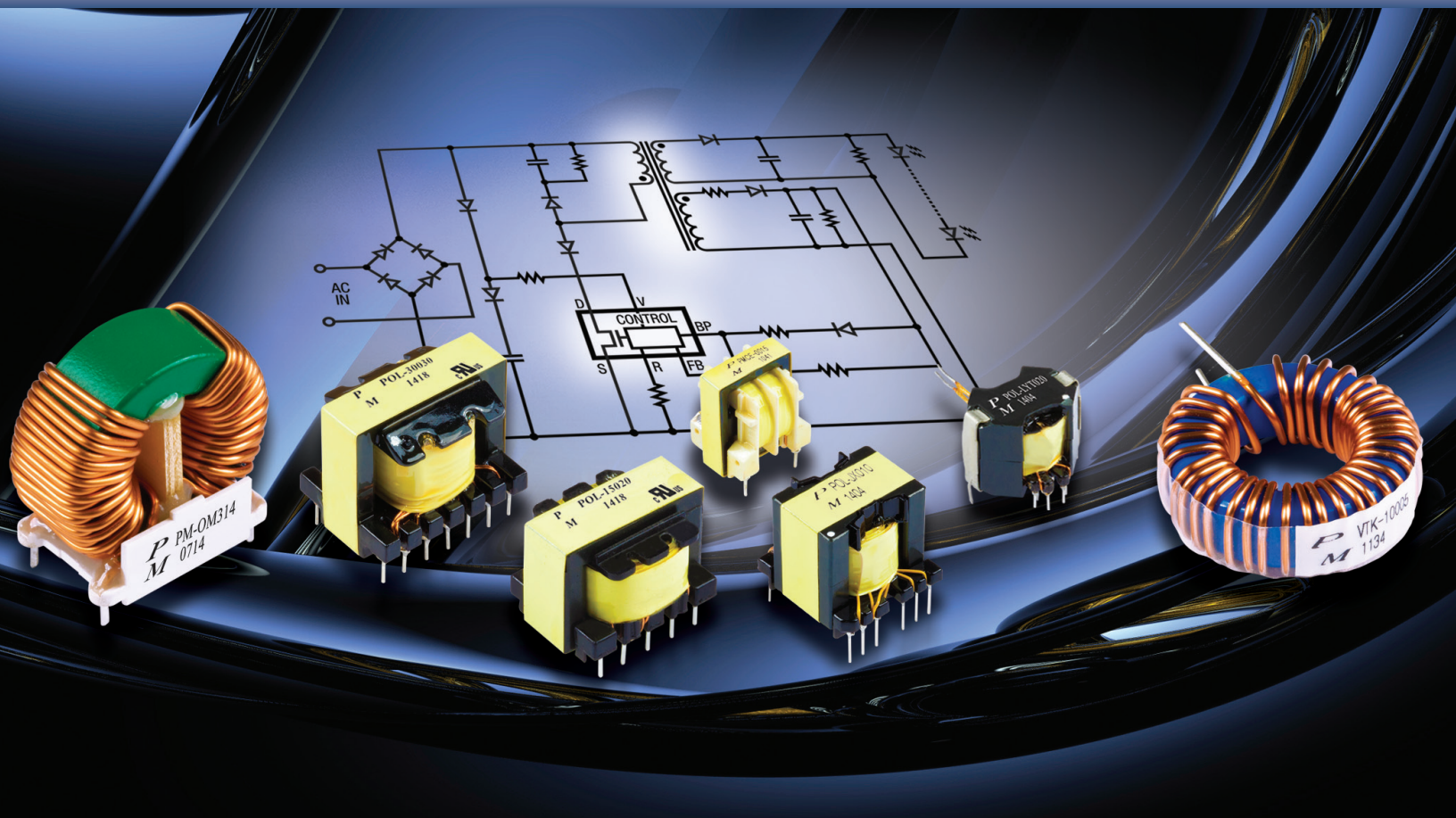


POWER MAGNETICS ENGINEERED TO YOUR DESIGN



Flyback Transformers

Isolation Transformers

Current Sense Transformers

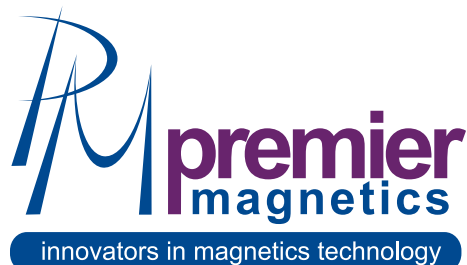
EMI/RFI Common Mode Suppression Inductors and Chokes

IC-Specific Reference Designs

Industry leading Quality and On-Time Delivery

Premier Magnetics - Company Details

- *Established in 1991*
- *ISO 9001:2008 Certified*
- *California Based U.S. Company with High Quality, Low Cost Off-Shore Manufacturing*
- *California Design Lab with Fast Turn Sample and Prototype Run Manufacturing*
- *Volume Production Facilities in China & Taiwan*
- *Design, Manufacture, and Market Leading Edge Magnetics Components: Transformers, Inductors, Filters, DC-DC Converters*
- *Extensive Line of Standard Product Lines Including UL and CSA Recognized Parts*
- *Standard Product Lines Designed Specifically to Work with Major Semiconductor Manufacturers IC's*
- *World Class Design/Engineering Expertise for Custom Design Requirements*
- *Customized Low Cost Application Circuit Designs Provided to Assist Customer Development of Power Circuits*
- *Quick Product Development Designs and Sample Delivery*
- *Broad Range of Magnetics Components Serving the Communications, Computer, Industrial, Commercial, Medical, Defense, and Avionics Industries*
- *Dedicated to the Highest Quality Products and Customer Service Possible*
- *Industry Leaders in Quality and On-Time Delivery*



20381 Barents Sea Circle • Lake Forest, CA 92630
949.452.0511 • FAX 949.452.0512
www.premiermag.com

POWER MAGNETICS CATALOG

Table of Contents

Power Magnetics Products	Series	Page
Transformers, UL/CSA Recognized, "TOP", PWM Designs	POL	2 - 7
Power Integrations TOPSwitch Cross Reference	TOP	8 - 9
Transformers, "TOPSwitch-HX", PWM Designs	POL-HX	10 - 11
Transformers, "TOPSwitch-JX", PWM Designs	POL-JX	12 - 13
Transformers, LED Applications, "LYT", "LNK"	POL-LYT, PNK	14 - 15
Transformers, UL/CSA Recognized, "TNY", PWM Designs	PNY	16 - 25
Power Integrations TinySwitch Cross Reference	TNY	26
Transformers, Universal AC Input, "LinkSwitch", PWM Designs	PNK	27
Power Integrations LinkSwitch Cross Reference	LNK	28
Fly-Buck™ Solution Transformers for Texas Instruments LM5017	TSD-342x	29 - 30
Low Cost Toroidal Power Inductors	VTP, HTP	31 - 32
Sendust Toroidal Power Inductors, High Frequency, Low Loss	VTK, HTK	33 - 34
EMI/RFI Common Mode AC Line Filters, Low Power	PMCU	35 - 36
EMI/RFI Common Mode AC Line Filters, Medium Power	PMCU	37 - 38
EMI/RFI Common Mode AC Line Filters, Medium-High Power	PMCE	39 - 40
Common Mode Power Line Chokes	PM-PLC	41 - 42
Open Common Mode EMI Suppression Inductors	PM-OM	43 - 49
Gate and Base Drive Transformers, Single and Double Ended	PMGD	50 - 53
Current Sense Inductors, with Center Hole	PM-CI	54
Current Sense Inductors	PM-CS	55 - 59
Linear 60 Hz, Split Bobbin, High Isolation, UL/CSA Recognized	PSB	60 - 61
Linear 60 Hz, Shrouded VDE Split Bobbin, UL/CSA Recognized	PVD	62 - 63
Linear 60 Hz, Low Profile Dual Bobbin, 2.5 to 48VA, 1500 Vrms	PLP	64 - 65
Power over Ethernet (PoE) Transformers	PM-POE	66 - 73
DC/DC and Push-Pull Transformers	PM-SM	74 - 75
Encapsulated Power Transformers	PTE	76 - 77
Flat Helix Inductors	PM-FH	78 - 81



— Designed for Use with Power Integrations, Inc. Off-Line Switcher Controllers —

- ▶ Designed to Meet UL Safety Standards
- ▶ Multiple Configurations from 2W to 300W

General Application Information

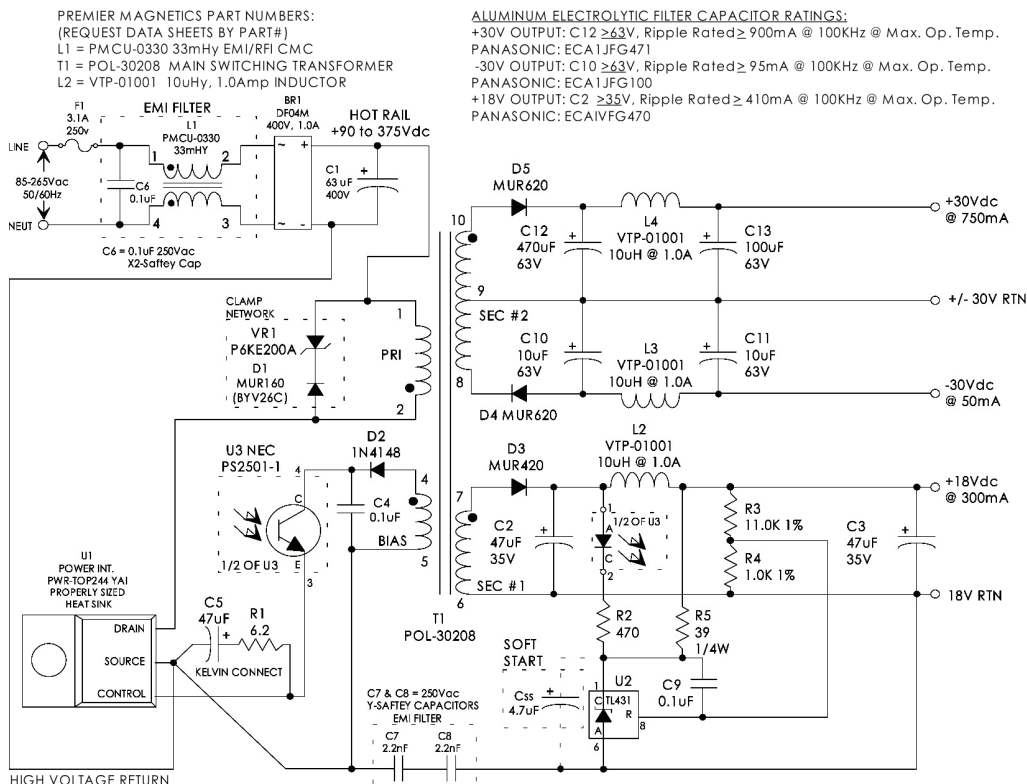
Premier Magnetics' off-line switch mode transformers have been designed for use with Power Integrations, Inc. TOPXXX series of off-line PWM switching controllers in the flyback buck-boost circuit configuration. This conversion topology can provide isolated multiple outputs with efficiencies up to 98%. Premier Magnetics' switching transformers have been optimized to provide maximum power throughput.

The TOPXXX series from Power Integrations are self contained up to 132KHz 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, multiple output (50W) application circuit utilizing a Power Integrations PWR-TOP244 switching controller in the flyback buck-boost configuration. The component values listed are intended for reference purposes only. Simpler topology is possible depending on the line/load regulation required.

Schematic



ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Output Voltage(s) Vout (Vdc)	Output Current(s) Iout (Amps)	Power (Watts)	Output Filter Inductor	Input Filter CMC
TSD-1684	TOP 232	2.5/3.3/12.0	0.5/0.6/0.16	5.2	VTP-01001	PMCU-0330
TSD-1715	TOP 242	3.3	0.6	2.0	VTP-01001	PMCU-0220
TSD-2023	TOP 243Y	3.3	4.0	14.0	VTP-01005	PMCU-0330
TSD-2236	TOP 242	3.3	2.4	8.0	VTP-01002	PMCU-0330
TSD-1848	TOP 242	3.3/5.0	1.5/0.7	8.5	VTP-01001	PMCU-0330
TSD-1813	TOP 233	3.3/5.0/5.0	1.5/1.5/0.3	14.0	VTP-01001	PMCU-0330
TSD-1687	TOP 243	5.0	2.5	12.5	VTP-01002	PMCU-0330
POL-05006*	TOP 210	5.0	0.6	3.0	VTP-01001	PMCU-0220
TSD-816*	TOP 210	5.0	0.6	3.0	VTP-01001	PMCU-0220
TSD-2620	TOP 242	5.0	0.5	1.85	VTP-01002	PMCU-0330
TSD-1185	TOP 221	5.0	0.7	3.5	VTP-00301	PMCU-0220
POL-05010*	TOP 200	5.0	1.0	5.0	VTP-01001	PMCU-0220
POL-05012*	TOP 200	5.0	1.2	6.0	VTP-01001	PMCU-0330
TSD-1812	TOP 242	5.0	1.6	8.0	VTP-01001	PMCU-0220
POL-05020*	TOP 223	5.0	2.0	10.0	VTP-01002	PMCU-0330
POL-05030*	TOP 202	5.0	3.0	15.0	VTP-01002	PMCU-0330
TSD-2286	TOP 234	5.0	3.0	150.0	VTP-01005	PMCU-0330
TSD-1486	TOP 200	5.0	1.0	5.0	VTP-01001	PMCU-0220
TSD-778*	TOP 201	5.0x2.0	1.20/0.080	6.4	VTP-01001	PMCU-0330
TSD-1952	TOP 202	5.0/5.0	1.2/1.2	12.0	VTP-01001	PMCU-0330
TSD-1853	TOP 246	5.0/5.0/5.0/5.0/24.0	7.0/0.45/0.15/0.15/0.5	140.0	VTP-01005	PMCE-0330
TSD-2062	TOP 249	5.0/6.7/21.3/-21.3/54.0	3.7/1.2/0.42/0.3/0.23	55.0	VTP-01005	PMCE-0330
TSD-1692	TOP 242	5.0/7.5/7.5	0.4/0.25/0.025	5.8	VTP-01001	PMCU-0220
TSD-1829	TOP 234	5.0/7.0/17.6/17.6/50	1.2/0.9/0.3/0.3/0.16	31.0	VTP-01002	PMCU-0330
TSD-937*	TOP 204	5.0/+8.0/-8.0	3.0/+1.0	30.0	VTP-01002	PMCE-0330
TSD-1201	TOP 225	5.0/+9.0/-9.0	6.0/+1.3/-0.13	43.0	VTP-01005	PMCU-0330
TSD-1160	TOP 225	5.0/+12.0/-12.0	6.0/+1.0/-0.10	43.0	VTP-01005	PMCU-0330
TSD-2220	TOP 250	5.0/12.0/-12.0	8.0/6.0/0.8	122.0	VTP-02007	PMCE-0330
TSD-1695	TOP 248	5.0/5.0/12.0/12.0	3.0/2.0/2.0/2.0	49.0	VTP-01001	PMCE-0330
TSD-1390	TOP 226	5.0/12.0	5.0/3.0	61.0	VTP-01005	PMCE-0330
TSD-877*	TOP 204	5.0/5.0/15.0	0.10/2.5/0.10	16.0	VTP-01002	PMCU-0330
TSD-1017*	TOP 209	5.0/15.0	0.02/0.10	1.7	N/A	PMCU-0220
TSD-1135	TOP 209	5.0/15.0	0.05/0.12	2.1	N/A	PMCU-0220
TSD-1305	TOP 209	5.0/15.0	0.05/0.12	2.1	N/A	PMCU-0220
TSD-1110*	TOP 224	5.0/+15.0/-15.0	2.2/+0.3	20.0	VTP-01002	PMCU-0330
TSD-1941	TOP 247	5.0/7.75/21.0/21.0/51.0	1.4/1.0/0.35/0.35/0.19	39.2	VTP-01002	PMCU-0330
TSD-1866	TOP 247	5.0/15.0/30.0	0.75/0.10/2.5	80.5	VTP-01002	PMCE-0330
TSD-893*	TOP 201	5.0/+12.0/-12.0/30.0	1.0/0.25/0.25/0.05	14.0	VTP-01001	PMCU-0330
TSD-876*	TOP 210	5.0/12.0	0.10/0.2	3.0	Bead	PMCU-0220
TSD-2414	TOP 248	5.0/12.0/33.0	1.0/0.5/0.2	18.0	VTP-01001	PMCU-0330
TSD-815	TOP 201	5.0/15.0	1.0/1.0	20.0	VTP-01001	PMCU-0330
TSD-1961	TOP 248	5.0/15.0/24.0	1.0/1.0/4.0	116.0	VTP-01002	PMCE-0330
TSD-1820	TOP 234	5.0/18.0	2.0/0.5	19.0	VTP-01001	PMCU-0330

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Output Voltage(s) Vout (Vdc)	Output Current(s) Iout (Amps)	Power (Watts)	Output Filter Inductor	Input Filter CMC
TSD-2014	TOP 244	5.0/20.0/5.0/15.0/-15.0	3.0/0.25/0.5/0.1/0.1	26.0	VTP-01005	PMCU-0330
TSD-1694	TOP 234	5.0/20.0/20.0	1.3/0.26/0.26	17.0	VTP-01001	PMCU-0330
TSD-1753	TOP 243	5.0/24.0	0.5/0.15	6.1	VTP-01001	PMCU-0220
TSD-858*	TOP 210	5.0/24.0	0.3/0.08	3.4	VTP-01001	PMCU-0220
TSD-1968	TOP 414	5.0/24.0	0.3/0.1	3.9	VTP-01001	PMCU-0330
TSD-1989	TOP 246	5.0/24.0	1.2/2.5	66.0	VTP-01001	PMCE-0330
TSD-1696	TOP 248	5.0/24.0/48.0	0.8/0.15/0.02	8.6	VTP-01001	PMCU-0330
TSD-2073	TOP 247	5.0/26.0	3.5/1.0	58.0	VTP-01005	PMCE-0330
TSD-1869	TOP 248	5.0/33.0	3.0/3.0	115.0	VTP-01002	PMCU-0330
TSD-779*	TOP 202	5.0/33.0	1.0/0.5	21.5	VTP-01001	PMCU-0100
TSD-988*	TOP 214	5.0/28.0	1.0/0.5	21.0	VTP-01001	PMCU-0100
TSD-983*	TOP 202	5.0/33.0	1.0/0.5	21.5	VTP-01001	PMCU-0100
TSD-1422	TOP 223Y	5.0/-65.0	1.0/0.1	11.5	VTP-01001	PMCU-0330
TSD-979*	TOP 210	5.5/10.0	0.8/0.05	5.0	VTP-01001	PMCU-0220
TSD-2012	TOP 243Y	5.7/24.0	1.0/0.5	18.2	VTP-01001	PMCU-0330
TSD-2085	TOP 244	6.0/1.8	2.5/2.0	19.0	VTP-01002	PMCU-0330
TSD-1046*	TOP 221	6.0/25.0	0.3/0.09	3.9	VTP-00301	PMCU-0220
TSD-1370	TOP 222	6.0/24.0	0.55/0.1	5.0	VTP-01001	PMCU-0220
TSD-1144	TOP 223	6/-38.0/-60.0	1.2/0.3/0.05	20.0	VTP-01001	PMCE-0330
TSD-940*	TOP 210	6.5	0.8	5.2	VTP-01001	PMCU-0220
TSD-860*	TOP 224	6.9/2.0x15.0	0.3/0.6	20.0	VTP-01001	PMCU-0330
TSD-1347	TOP 224	6.9/24.0/-15.0	0.3/0.6/0.2	20.0	VTP-01001	PMCU-0330
POL-07050*	TOP 226	7.0	5.0	35.0	VTP-01005	PMCE-0330
POL-07003*	TOP 209P	7.5	0.26	2.0	VTP-01002	PMCU-0330
TSD-1093*	TOP 209P	7.5	0.26	2.0	VTP-01002	PMCU-0330
POL-07020*	TOP 202	7.5	2.0	15.0	VTP-01002	PMCU-0330
TSD-1024*	TOP 223P	7.5/15.0	1.0/0.25	11.3	VTP-01002	PMCU-0330
TSD-1751	TOP 249	7.5/15.0	1.0/8.0	128.0	VTP-02007	PMCE-0330
TSD-1759	TOP 243	7.5/24.0/24.0	0.27/0.20/0.04	7.8	VTP-01001	PMCU-0220
TSD-2090	TOP 247	7.5/26.0	3.5/1.0	53.0	VTP-01005	PMCE-0330
TSD-2557	TOP 248	8.0	10.0	80.0	VTP-25010	PMCE-0330
TSD-1195	TOP 224	8.0/16.0/16.0	2.0/0.25/0.25	30.0	VTP-01001	PMCE-0330
TSD-1740	TOP 248	8.0/13.0/18.0/18.0	1.5/3x1.25	73.3	VTP-01001	PMCE-0330
TSD-794*	TOP 202	8.5	4.0	34.0	VTP-01005	PMCU-2220
TSD-1691	TOP 243	8.6	1.8	15.5	VTP-01002	PMCU-0330
TSD-1489	TOP 221Y	9.0	0.40	3.6	VTP-01001	PMCU-0220
TSD-2552	TOP 243	9.0/9.0	0.5/0.5	9.0	VTP-01001	PMCU-0330
TSD-2560	TOP 242Y	9.0	1.0	9.0	VTP-01001	PMCU-0330
TSD-880*	TOP 204	9.0/24.0	3.0/0.60	50.0	VTP-01002	PMCE-0330
POL-97505	TOP 221	9.75	0.5	4.9	VTP-01001	PMCU-0330
TSD-813*	TOP 200	9.75	0.5	4.9	Bead	PMCU-0220
POL-97506*	TOP 221	9.75	0.6	5.8	Bead	PMCU-0220
TSD-2284	TOP 234	10.0/10.0/18.0/18.0	0.78/0.36/0.06/0.06	14.0	VTP-01001	PMCU-0330

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Output Voltage(s) Vout (Vdc)	Output Current(s) Iout (Amps)	Power (Watts)	Output Filter Inductor	Input Filter CMC
TSD-825*	TOP 221P	12.0	0.3	3.6	VTP-01001	PMCU-0220
TSD-935*	TOP 200	12.0	0.5	5.0	VTP-01001	PMCU-0220
TSD-990*	TOP 222P	12.0	0.67	8.0	VTP-01001	PMCU-0220
POL-12012*	TOP 202	12.0	1.2	15.0	VTP-01001	PMCU-0330
POL-12017*	TOP 224P	12.0	1.7	20.4	VTP-01002	PMCU-0220
POL-15020*	TOP 226	12.0	2.5	30.0	VTP-01002	PMCU-0330
POL-15033*	TOP 226	12.0	3.0	36.0	VTP-01002	PMCE-0330
TSD-2325	TOP 245	12.0	2.5	30.0	VTP-01002	PMCE-0330
TSD-2331	TOP 244	12.0	2.5	30.0	VTP-01002	PMCE-0330
TSD-2443	TOP 247	12.0	2.75	33.0	VTP-01002	PMCE-0330
TSD-762*	TOP 103	12.0	3.4	41.0	VTP-01002	PMCE-0330
TSD-1834	TOP 247	12.0	3.75	45.0	VTP-01005	PMCE-0330
TSD-2371	TOP 250	12.0	4.25	51.0	VTP-01005	PMCE-0330
TSD-777*	TOP 104	12.0	5.0	60.0	VTP-01005	PMCE-0330
TSD-1405	TOP 224P	12.0	1.7	20.4	VTP-01002	PMCU-0220
POL-12208*	TOP 223	12.0x2.0	0.5/0.3	9.6	VTP-01001	PMCU-0330
POL-12216*	TOP 224	12.0x2.0	0.8/0.8	21.5	VTP-01001	PMCU-0330
TSD-1943	TOP 248	12.0x2.0	2.5/2.5	62.5	VTP-01002	PMCE-0330
TSD-1551	TOP 222Y	12.0/5.0/3.3/-12.0	0.1/0.2/1.5/0.1	8.4	VTP-01001	PMCU-0330
TSD-2058	TOP 246	12.0/5.0/3.3	1.0/2.0/5.0	39.0	VTP-01005	PMCE-0330
TSD-1654	TOP 223Y	12.0/12.0	0.3/0.5	9.6	VTP-01001	PMCU-0330
TSD-2148	TOP 242	12.0/15.0	0.3/0.75	14.0	VTP-01001	PMCU-0330
TSD-2283	TOP 249	12.0/24.0	5.0/2.5	120.0	VTP-01005	PMCE-0330
TSD-1469	TOP 222Y	13.0/6.0/3.3/-13.0	0.1/0.2/1.5/0.1	8.8	VTP-01001	PMCU-0330
POL-15033*	TOP 104	13.8	4.0	56.0	VTP-01002	PMCE-0330
TSD-946*	TOP 210	14.0	0.2	3.0	VTP-01001	PMCU-0330
TSD-1010	TOP 210	14.0	0.43	4.5	VTP-01001	PMCU-0330
TSD-1003*	TOP 210	15.0	0.2	3.0	VTP-01001	PMCU-0330
TSD-1330	TOP 210	15.0	0.2	3.0	VTP-01001	PMCU-0330
TSD-1811	TOP 243	15.0	1.0	15.0	VTP-01001	PMCU-0220
TSD-737*	TOP 223	15.0	1.0	15.0	VTP-01001	PMCU-0330
POL-15020*	TOP 226	15.0	2.0	30.0	VTP-01002	PMCU-0330
POL-15033*	TOP 226	15.0	3.33	50.0	VTP-01002	PMCE-0330
TSD-812*	TOP 204	15.0	3.33	50.0	VTP-01002	PMCE-0330
POL-15073*	TOP 204	15.0	7.33	110.0	VTP-02007	PMCE-3330
POL-15204*	TOP 200	15x2	0.2/0.2	6.0	VTP-01001	PMCU-0220
TSD-1683	TOP 221	15.0/15.0	0.2/0.18	6.3	VTP-01001	PMCU-0220
TSD-860*	TOP 202	15.0/6.9	0.6/0.3	20.0	VTP-01001	PMCU-0330
TSD-1432	TOP 224Y	15.0/-15.0/6.9	0.8/0.8/0.3	26.1	VTP-01001	PMCU-0330
TSD-1385	TOP 204	15.0/15.0/5.0	0.2/0.2/1.0	11.0	VTP-01002	PMCU-0330
TSD-873	TOP 210	17.0	0.1	1.7	Bead	N/A
TSD-1035	TOP 221	17.0	0.2	3.5	Bead	N/A
TSD-1197	TOP 227	17.0/21.0/17.0	2.0/0.25/0.25	90.0	VTP-01002	PMCE-0330

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Output Voltage(s) Vout (Vdc)	Output Current(s) Iout (Amps)	Power (Watts)	Output Filter Inductor	Input Filter CMC
TSD-1055*	TOP 210	15V to 18V	0.30 to 0.35	5.5	VTP-01001	PMCU-0220
TSD-1439	TOP 221Y	18.0	0.2	3.6	VTP-01001	PMCU-0220
TSD-968*	TOP 202	18.0x2.0	0.4/0.4	14.4	VTP-01001	PMCU-0330
TSD-2175	TOP 243	18.0/12.0/18.0	0.7/0.7/0.4	29.0	VTP-01001	PMCU-0330
POL-30208	TOP 244	18.0/+30.0/-30.0	0.3/0.75/0.5	30.0	VTP-01001	PMCU-0330
TSD-1668	TOP 232	18.0	0.4	7.2	VTP-01001	PMCU-0220
TSD-1752	TOP 232	19.0	0.45	8.6	VTP-01001	PMCU-0220
TSD-2655	TOP 247	19.5	4.62	90.0	VTP-01005	PMCE-0330
TSD-1993	TOP 234Y	20.5/20.5	1.0/0.45	30.0	VTP-01001	PMCU-0330
POL-22007*	TOP 202	22.0	0.7	15.4	VTP-01001	PMCU-0330
TSD-924*	TOP 202	22.0	0.7	15.4	VTP-01001	PMCU-0330
POL-24013*	TOP 204	22.0	1.5	33.0	VTP-01002	PMCU-0330
POL-24020*	TOP 226	22.0	2.0	44.0	VTP-01002	PMCE-0330
TSD-1936	TOP 243	24.0	0.5	12.0	VTP-01001	PMCU-0220
TSD-1693	TOP 246	24.0	3.5	84.0	VTP-01005	PMCU-0330
TSD-790*	TOP 200	24.0	0.15	3.6	VTP-01001	PMCU-0220
TSD-2514	TOP 243	24.0	0.5	12.0	VTP-01001	PMCU-0330
TSD-1791	TOP 234	24.0	1.25	30.0	VTP-01001	PMCU-0330
POL-24013*	TOP 226	24.0	1.3	31.2	VTP-01002	PMCU-0330
TSD-1043*	TOP 204	24.0	1.3	31.2	VTP-01002	PMCU-0330
TSD-975*	TOP 214	24.0	1.3	31.2	VTP-01001	PMCU-0330
TSD-2339	TOP 250	24.0	12.5	300.0	VTP-07012	PMCE-3100
TSD-2635	TOP 250	24.0	6.0	144.0	VTP-02007	PMCE-0330
POL-24020*	TOP 226	24.0	2.0	48.0	VTP-01002	PMCE-0330
POL-24208	TOP 226	24.0/2.0	0.8x2.0	38.4	VTP-01001	PMCU-0330
POL-24219	TOP 227	24.0/2.0	1.875x2.0	90.0	VTP-01001	PMCE-0330
TSD-2010	TOP 249	24.0/2.0	2.7/2.7	130.0	VTP-01005	PMCE-0330
TSD-1667	TOP 242	24.0/5.0	0.15/0.4	5.6	VTP-01001	PMCU-0220
TSD-1395	TOP 224Y	24.0/5.0	1.0/3.0	39.0	VTP-01002	PMCE-0330
TSD-1406	TOP 223P	24.0/5.0	0.15/0.8	7.6	VTP-01001	PMCU-5330
TSD-1476	TOP 202YAI	24.0/5.0	0.5/1.0	17.0	VTP-01001	PMCU-0100
TSD-2645	TOP 249	24.0/5.0	3.5/3.0	99.0	VTP-01005	PMCE-0330
TSD-1647	TOP 222	4.0/7.5	0.2/0.265	6.8	VTP-01001	PMCU-0100
TSD-2448	TOP 248	24.0/24.0	0.62/0.62	35.0	VTP-01001	PMCU-0330
TSD-1468	TOP 222	-24.0/-60.0	0.30/0.13	15.0	VTP-01001	PMCU-0330
TSD-2036	TOP 243Y	26.0	0.8	21.0	VTP-01001	PMCU-0330
TSD-2634	TOP 261	26.0/28.0	7.0/1.5	210.0	VTP-07012	PMCE-3100
TSD-2125	TOP 245	28.0	1.15	32.0	VTP-01002	PMCU-0330
POL-28022*	TOP 204	28.0	2.2	61.6	VTP-01002	PMCE-0330
TSD-1717	TOP 249	28.0	7.5	210.0	VTP-02007	PMCE-0330
POL-30030*	TOP 227Y	28.0	4.0	112.0	VTP-01005	PMCE-0160
TSD-1056*	TOP 227Y	29.0/9.5	3.5/0.25	104.0	VTP-01003	PMCE-0330
POL-30030*	TOP 227Y	30.0	3.0	90.0	VTP-01002	PMCE-0160

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Output Voltage(s) Vout (Vdc)	Output Current(s) Iout (Amps)	Power (Watts)	Output Filter Inductor	Input Filter CMC
TSD-1737	TOP 247	30.0	4.0	120.0	VTP-01005	PMCE-0330
TSD-2647	TOP 247Y	34.0/-34.0/24.0	1.0/1.0/0.25	74.0	VTP-01002	PMCE-0330
TSD-2176	TOP 244Y	40.0/5.0/3.3	0.5/0.3/0.2	32.0	VTP-01002	PMCU-0330
POL-40020*	TOP 227Y	40.0	2.0	80.0	VTP-01002	PMCE-0160
TSD-2194	TOP 250	42.0	4.2	177.4	VTP-01005	PMCE-0330
TSD-2379	TOP 243	44.0/44.0	0.3/0.1	18.0	VTP-01001	PMCU-0330
POL-45012*	TOP 204	45.0	1.20	54.0	VTP-01002	PMCE-0330
TSD-1421	TOP 222Y	48.0	0.25	12.0	VTP-01001	PMCE-0330
TSD-2119	TOP 233	48.0	0.5	24.0	VTP-01001	PMCU-0330
TSD-1739	TOP 246	48.0	2.0	96.0	VTP-01002	PMCE-0330
TSD-1854	TOP 250	48.0	4.16	200.0	VTP-01005	PMCE-0330
TSD-2470	TOP 250	60.0	4.16	250.0	VTP-01005	PMCE-0330
TSD-2629	TOP 261	60.0	5.0	300.0	VTP-01005	PMCU-0330
TSD-1686	TOP 246	72.0	0.8	58.0	VTP-01001	PMCE-0330
TSD-1809	TOP 245	72.0	0.5	36.0	VTP-01001	PMCU-0330
TSD-1552	TOP 227	85.0/-85.0/48.0/24.0	0.175/0.175/1.3/1.3	123.4	VTP-01002	PMCE-0330
TSD-2559	TOP 249Y	85.0/-85.0/48.0/24.0	0.5 each	121.0	VTP-01001	PMCE-0330
TSD-974*	TOP 104	118.0	0.13	15.3	VTP-01002	N/A
TSD-2569	TOP 258Y	180.0	0.6	108.0	VTP-01001	PMCE-0330
TSD-1851	TOP 249	360.0	0.180	65.0	VTP-01001	PMCE-0330
TSD-2637	TOP 258	500.0	0.200	100.0	VTP-01001	PMCE-0330

* Indicated Parts are UL Recognized Under UL file #E162344

Power Integrations Cross Reference Old IC to New IC

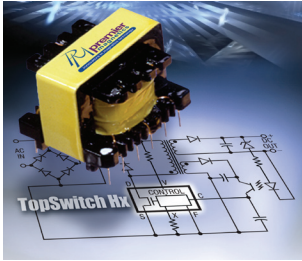
OLD TOPSwitch	NEW TOPSwitch
<u>TOPSwitch</u> TOP100YN 0-20 W (100/110 VAC) TOP101YN 15-35 W (100/110 VAC) TOP102YN 20-45 W (100/110 VAC) TOP103YN 25-55 W (100/110 VAC) TOP104YN 30-60 W (100/110 VAC) TOP200YN 5-12 W (85-265 VAC) 10-25 W (100/115/230 VAC) TOP201YN 0-22 W (85-265 VAC) 20-45 W (100/115/230 VAC) TOP202YN 15-30 W (85-265 VAC) 30-60 W (100/115/230 VAC) TOP203YN 20-35 W (85-265 VAC) 40-70 W (100-115/230 VAC) TOP204YN 30-50 W (85-265 VAC) 60-100 W (100/115/230 VAC) TOP209PN 2 W (85-265 VAC) 4 W (100/115/230 VAC) TOP209GN 2 W (85-265 VAC) 4 W (100/115/230 VAC) TOP209GN-TL 2 W (85-265 VAC) 4 W (100/115/230 VAC) TOP210PN 5 W (85-265 VAC) 8 W (100/115/230 VAC) TOP210GN 5 W (85-265 VAC) 8 W (100/115/230 VAC) TOP210GN-TL 5 W (85-265 VAC) 8 W (100/115/230 VAC) TOP214YN 25-42 W (85-265 VAC) 50-85 W (100/115/230 VAC)	<u>TOPSwitch-GX</u> TOP242YN 14 W (85-265 VAC) 22 W (230 VAC) TOP243YN 30 W (85-265 VAC) 45 W (230 VAC) TOP243YN 30 W (85-265 VAC) 45 W (230 VAC) TOP244YN 45 W (85-265 VAC) 65 W (230 VAC) TOP244YN 45 W (85-265 VAC) 65 W (230 VAC) TOP242YN 14 W (85-265 VAC) 22 W (230 VAC) TOP242YN 14 W (85-265 VAC) 22 W (230 VAC) TOP243YN 30 W (85-265 VAC) 45 W (230 VAC) TOP243YN 30 W (85-265 VAC) 45 W (230 VAC) TOP244YN 45 W (85-265 VAC) 65 W (230 VAC) TOP242PN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN-TL 10 W (85-265 VAC) 15 W (230 VAC) TOP242PN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN 10 W (85-265 VAC) 15 W (230 VAC) TOP243GN-TL 15 W (85-265 VAC) 25W (230 VAC) TOP244YN 45 W (85-265 VAC) 65 W (230 VAC)
<u>TOPSwitch-II Family</u> TOP221PN 6 W (85-265 VAC) 9 W (100/115/230 VAC) TOP221GN 6 W (85-265 VAC) 9 W (100/115/230 VAC) TOP221GN-TL 6 W (85-265 VAC) 9 W (100/115/230 VAC) TOP221YN 7 W (85-265 VAC) 12 W (100/115/230 VAC) TOP222PN 10 W (85-265 VAC) 15 W (100/115/230 VAC) TOP222GN 10 W (85-265 VAC) 15 W (100/115/230 VAC) TOP222GN-TL 10 W (85-265 VAC) 15 W (100/115/230 VAC) TOP222YN 15 W (85-265 VAC) 25 W (100/115/230 VAC) TOP223PN 15 W (85-265 VAC) 25 W (100/115/230 VAC) TOP223GN 15 W (85-265 VAC) 25 W (100/115/230 VAC) TOP223GN-TL 15 W (85-265 VAC) 25 W (100/115/230 VAC) TOP223YN 30 W (85-265 VAC) 50 W (100/115/230 VAC) TOP224PN 20 W (85-265 VAC) 30 W (100/115/230 VAC) TOP224GN 20 W (85-265 VAC) 30 W (100/115/230 VAC) TOP224GN-TL 20 W (85-265 VAC) 30 W (100/115/230 VAC) TOP224YN 45 W (85-265 VAC) 75 W (100/115/230 VAC) TOP225YN 60 W (85-265 VAC) 100 W (100/115/230 VAC) TOP226YN 75 W (85-265 VAC) 125 W (100/115/230 VAC) TOP227YN 90 W (85-265 VAC) 150 W (100/115/230 VAC)	<u>TOPSwitch-GX</u> TOP242PN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN-TL 10 W (85-265 VAC) 15 W (230 VAC) TOP242FN 10 W (85-265 VAC) 15 W (230 VAC) TOP242PN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN-TL 10 W (85-265 VAC) 15 W (230 VAC) TOP242YN 14 W (85-265 VAC) 22 W (230 VAC) TOP243PN 15 W (85-265 VAC) 25W (230 VAC) TOP243GN 15 W (85-265 VAC) 25W (230 VAC) TOP243GN-TL 15 W (85-265 VAC) 25W (230 VAC) TOP243YN 30 W (85-265 VAC) 45 W (230 VAC) TOP244PN 20 W (85-265 VAC) 28 W (230 VAC) TOP244GN 20 W (85-265 VAC) 28 W (230 VAC) TOP244GN-TL 20 W (85-265 VAC) 28 W (230 VAC) TOP244YN 45 W (85-265 VAC) 65 W (230 VAC) TOP245PN 22W (85-265 VAC) 30 W (230 VAC) TOP245GN 22W (85-265 VAC) 30 W (230 VAC) TOP245YN 60W (85-265 VAC) 85 W (230 VAC)

Power Integrations Cross Reference Old IC to New IC

OLD TOPSwitch	NEW TOPSwitch
<u>TOPSwitch-FX Family</u> TOP232PN 10 W (85-265 VAC) 15W (230 VAC) TOP232GN 10 W (85-265 VAC) 15W (230 VAC) TOP232GN-TL 10 W (85-265 VAC) 15W (230 VAC) TOP232YN 15 W (85-265 VAC) 25 W (230 VAC) TOP233PN 15 W (85-265 VAC) 25W (230 VAC) TOP233GN 15 W (85-265 VAC) 25W (230 VAC) TOP233GN-TL 15 W (85-265 VAC) 25W (230 VAC) TOP233YN 30 W (85-265 VAC) 50 W (230 VAC) TOP234PN 20 W (85-265 VAC) 30 W (230 VAC) TOP234GN 20 W (85-265 VAC) 30 W (230 VAC) TOP234GN-TL 20 W (85-265 VAC) 30 W (230 VAC) TOP234YN 45 W (85-265 VAC) 75 W (230 VAC)	<u>TOPSwitch-GX</u> TOP242PN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN 10 W (85-265 VAC) 15 W (230 VAC) TOP242GN-TL 10 W (85-265 VAC) 15 W (230 VAC) TOP242YN 14 W (85-265 VAC) 22 W (230 VAC) TOP243PN 15 W (85-265 VAC) 25W (230 VAC) TOP243GN 15 W (85-265 VAC) 25W (230 VAC) TOP243GN-TL 15 W (85-265 VAC) 25W (230 VAC) TOP243YN 30 W (85-265 VAC) 45 W (230 VAC) TOP244PN 20 W (85-265 VAC) 28 W (230 VAC) TOP244GN 20 W (85-265 VAC) 28 W (230 VAC) TOP244GN-TL 20 W (85-265 VAC) 28 W (230 VAC) TOP244YN 45 W (85-265 VAC) 65 W (230 VAC)

The purpose of the above table is to accelerate time to prototype and provide a solid foundation from which to begin finalizing your production circuit design. It is the user's responsibility to confirm IC compatibility and circuit functionality.

Off-Line Switch Mode Transformers — TOPSwitch-HX™



— Designed for Use with Power Integrations, Inc.
TOPSwitch-HX Series of Off-Line Switcher Controllers —

- ▶ Class B 130°C, Class F 155°C Insulation System
- ▶ Multiple Configurations Available

General Application Information

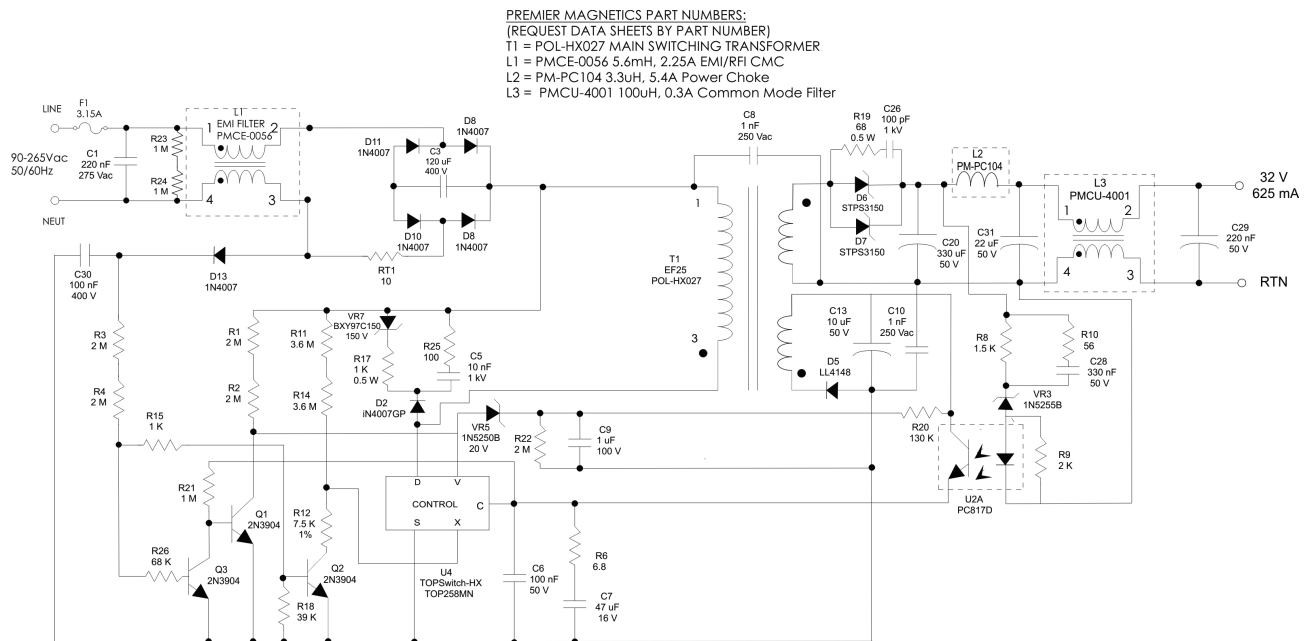
The Premier Magnetics' POL-HXxxx line of transformers listed in this catalog are designed specifically for use with the Power Integrations, Inc. HX series lineup of switcher controllers, and used together in the design of their standard off-line AC-DC flyback power supplies. This conversion topology can accept universal 85-265 VAC input and deliver single and multiple isolated outputs with high efficiencies under all load conditions.

The Power Integrations' TOPxxxEN series controllers, as noted in the table on the following page, operate at a higher frequency of 132kHz or, as an option, at the half frequency of 66kHz.

The higher 132kHz frequency allows for a smaller physical transformer, which in turn results in a smaller overall power supply size. There is an optional lower 66kHz frequency available on these "EN" series controllers for video applications. The other non-EN series controllers listed within the table operate at 66kHz only.

The POL-HXxxx series is designed to provide high performance and reliability, high efficiency across the load and maximum power throughput, providing value to support a cost effective power supply design.

Schematic



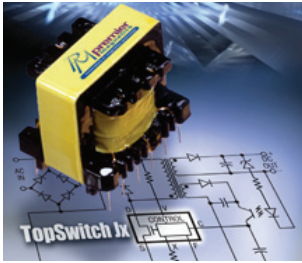
Note: This application circuit is that of a 20W continuous, 80W peak, universal input power supply using the Power Integration's TOPSwitch-HX controller (TOP258MN), and the Premier Magnetic's isolation transformer (POL-HX027), common mode choke (PMCE-0056) and power inductor (PM-PC104).

Off-Line Switch Mode Transformers – TOPSwitch-HX™

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Input Volts	Output Volts@Currents(A)	Output Power	Input Filter CMC	Output Filter Inductor
POL-HX009	TOP 258MN	85-265	12V@0.8, 8V@0.075, 40V@0.3	22.0	PMCE-0330	VTP-01001
POL-HX010	TOP 260EN	102-265	12V@8.0, 8V@4.0	100.0	PMCE-0330	VTK-01007, VTP-01005
POL-HX011	TOP 258PN	185-265	24V@2.08	50.0	PMCE-0330	VTP-12001
POL-HX012	TOP 259LN	90-265	19.7V@3.33	65.0	PMCE-0330	VTP-10002
POL-HX013	TOP 254EN	90-265	12V@1.5	18.0	PMCE-0330	VTP-12001
POL-HX014	TOP 254EN	90-265	6V@2.5	15.0	PMCE-0330	VTP-10002
POL-HX015	TOP 258EN	90-265	19V@3.42	65.0	PMCE-0330	VTP-10002
POL-HX016	TOP 258EN	90-265	19V@3.42	65.0	PMCE-0330	VTP-10002
POL-HX017	TOP 259EN	90-265	19V@3.42	65.0	PMCE-0330	VTP-10002
POL-HX018	TOP 255PN	85-265	12V@1.67	20.0	PMCE-0330	VTP-12001
POL-HX019	TOP 257EN	90-265	13V@2.69	35.0	PMCE-0330	VTP-10002
POL-HX020	TOP 256EN	90-265	5V@2.0, 15V@2.0	40.0	PMCE-0330	VTP-12001
POL-HX021	TOP 257EN	90-265	13V@2.69	35.0	PMCE-0330	VTP-10002
POL-HX022	TOP 258PN	90-265	5V@1.7, 15V@1.9	35.0	PMCE-0330	VTP-01001, VTP-01001
POL-HX023	TOP 258PN	90-265	5V@2.2, 12V@2.0	35.0	PMCE-0330	VTP-01001, VTP-01001
POL-HX024	TOP 261EN	108-132	5V@2.0, 12V@2.0, 24V@4.1	133.0	PMCE-0330	VTP-01001, VTP-01005
POL-HX025	TOP 256EN	90-265	19V@2.1	40.0	PMCE-0330	VTP-01001
POL-HX026	TOP 256MN	100-375DC	5V@4.0	20.0	PMCE-0330	VTP-01005
POL-HX027	TOP 258MN	90-265	32V@0.65	20.0	PMCE-0330	VTP-01001
POL-HX028	TOP 258MN	90-265	24V@1.46	35.0	PMCE-0330	VTP-12001
POL-HX029	TOP 257PN	85-265	12V@2.5	30.0	PMCE-0330	VTP-10002
POL-HX030	TOP 252EN	85-265	5V@1.0	5.0	PMCE-0330	VTP-10002
POL-HX031	TOP 261EN	195-265	24V@12.0, 5V@0.1	288.0	PMCE-0330	VTK-07012 & VTP-05001
POL-HX036	TOP 258EN	90-265	19V@3.42	65.0	PMCE-0330	VTP-10002
POL-HX037	TOP 258EN	90-265	19V@3.42	65.0	PMCE-0330	VTP-10002
POL-HX038	TOP 252	195-265	6V@1.5	9.0	PMCE-0330	VTP-10002
POL-HX039	TOP 258	195-265	13.2V@7.5	99.0	PMCE-0330	VTK-05010
POL-HX039A	TOP 258	195-265	13.2V@7.5	99.0	PMCE-0330	VTK-05010
POL-HX040	TOP 258	85-265	18V@2.5	45.0	PMCE-0330	VTP-10002
POL-HX041	TOP 258EN	85-265	26.4V@3.0	79.0	PMCE-0330	VTP-10002
POL-HX042	TOP 255	90-185	18V@2.2	40.0	PMCE-0330	VTP-10002

Off-Line Switch Mode Transformers — TOPSwitch-JX™



— *Designed for Use with Power Integrations, Inc. TOPSwitch-JX Series of Off-Line Switcher Controllers —*

- ▶ Class B 130°C, Class F 155°C Insulation System
- ▶ Multiple Configurations Available

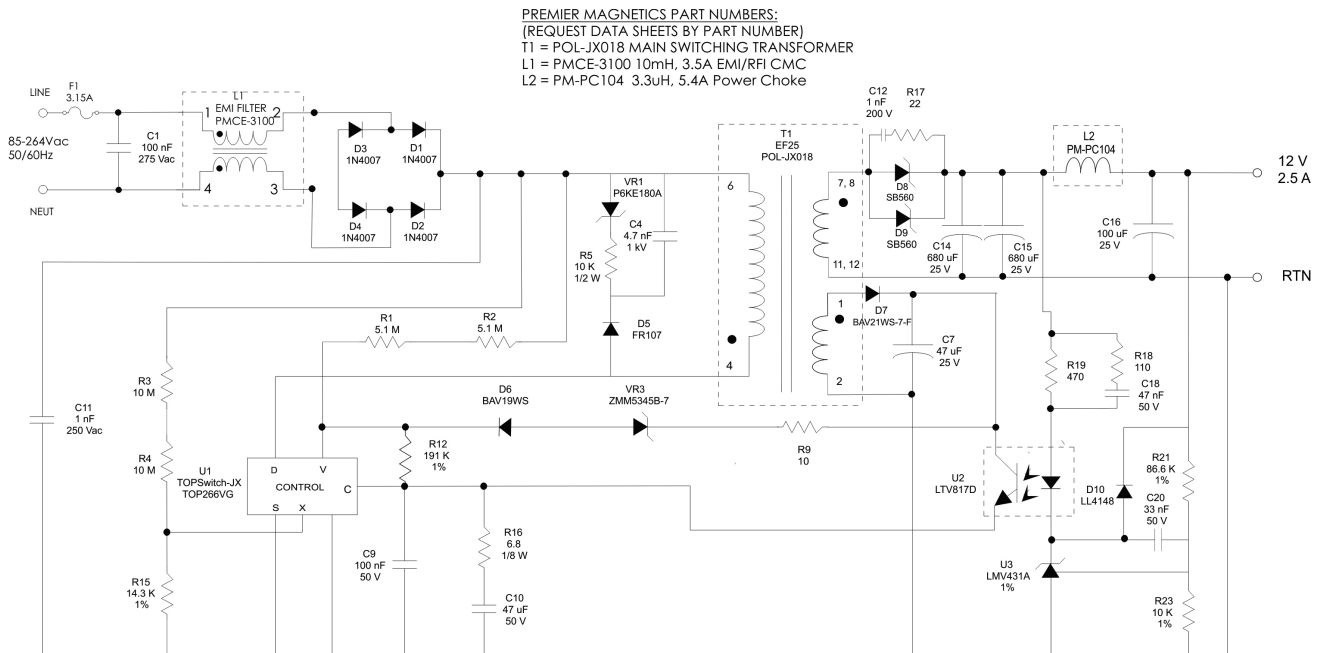
General Application Information

The Premier Magnetic's POL-JXxxx line of transformers listed in this brochure are designed specifically for use with the Power Integrations, Inc. TOPSwitch-JX series lineup of off-line switcher controllers, and used together in the design of their standard off-line AC-DC flyback power supplies. This conversion technology can accept universal 85-265 Vac input and deliver an isolated output providing high efficiency under all load conditions with good performance at the low end and at standby. This easily allows the design to meet the latest, most stringent energy efficiency standards e.g., (ENERGY STAR).

The TOPSwitch-JX series controllers operate at 132kHz, which allow for smaller physical transformers and thus smaller overall power supplies. Or the controllers can operate at the half frequency of 66kHz that allows for the highest overall efficiencies possible.

The POL-JXxxx series is optimally designed to provide high performance and reliability, high efficiency across the load at both operating frequencies and maximum power throughput at low cost, providing value to the design of the standard, cost effective power supply designs offered by Power Integrations.

Schematic



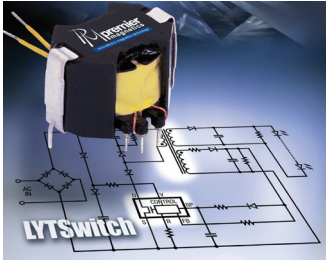
Note: Application Circuit illustration above is of a high efficiency 12V, 30W universal input flyback power supply using the Power Integrations' TOPSwitch-JX controller (TOP266VG), and Premier Magnetics' isolation transformer (POL-JX018), common mode choke (PMCE-3100) and power choke (PM-PC104).

Off-Line Switch Mode Transformers — TOPSwitch-JX™

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	APPLICATION DATA			Recommended	
		Input Volts	Output Volts@Currents(A)	Output Power	Input Filter CMC	Output Filter Inductor
POL-JX010	TOP 267EG	90-265	5V@10.0	50.0	PMCU-4100	VTP-00310
POL-JX011	TOP 265EG	110-400	5V@4.0	20.0	N/A	VTP-12001
POL-JX012	TOP 259LN	110-400	12V@2.5	30.0	N/A	VTP-10002
POL-JX013	TOP 267KG	110-400	12V@3.35	40.0	N/A	VTP-30005
POL-JX014	TOP 269EG	90-265	19V@3.42	65.0	PMCU-4009	VTP-30005
POL-JX015	TOP 266EG	90-265	5V@2.5, 14.5@1.0	27.0	PMCU-4330	VTP-01002, VTP-00301
POL-JX016	TOP 267VG	90-265	5V@1.5, 16@1.8	36.3	PMCU-4330	VTP-01002
POL-JX017	TOP 264VG	90-265	12V@1.5	18.0	PMCU-0330	VTP-10002
POL-JX018	TOP 266VG	90-265	12V@2.5	30.0	PMCU-0330	VTP-10002
POL-JX019	TOP 267EG	85-265	18V@2.0, 18V@2.0	72.0	PMCU-0330	VTP-10002
POL-JX020	TOP 270	85-265	15V@2.0, 12V@2.0, 24V@2.0	82.0	PMCU-0330	VTP-10002
POL-JX025	TOP 268	90-265	5V@2.0, 9V@2.0, 12V@2.0	24.0	PMCU-4400	N/A
POL-JX030	TOP 268	190-265	30V@3.0	90.0	PMCU-0330	VTP-30005
POL-JX032	TOP 265	90-265	3.3V@2.1, 24V@0.6	22.0	PMCU-0330	VTP-10002
POL-JX033	TOP 265	90-265	5.0V@2.1, 24V@1.0	34.5	PMCU-0330	VTP-10002

LED Lighting Applications Transformers and Inductors



— Designed for Use with Power Integrations Inc. LED Driver LinkSwitch and LYTSwitch Controllers —

- ▶ Class B 130°C, Class F 155°C Insulation System
- ▶ Multiple Configurations Available

General Application Information

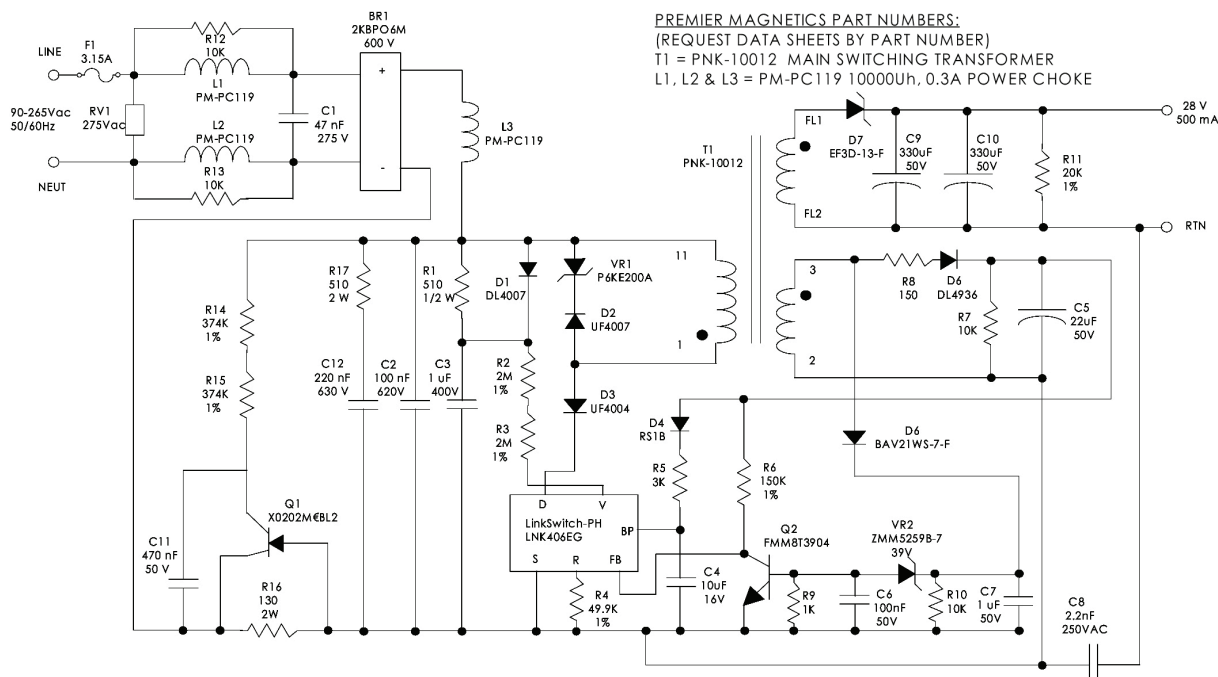
The Premier Magnetics' PNK line of transformers and inductors listed in this catalog are designed specifically for use with Power Integrations, Inc. LinkSwitch and LYTSwitch series of LED Driver controllers.

The Power Integrations' LinkSwitch series of LED driver controllers, which combined with the Premier Magnetics PNK series of transformers and inductors, offer very high power factor (> 90%), high efficiency (> 90% achievable) and an accurate constant current output for LEDs. The PNK series transformers provide a bias winding that allows the output voltage to be monitored from the primary side without the need of secondary side feedback components.

The Premier Magnetics PNK-xxxxx line of LED Driver transformers and inductors have been optimized to provide the best possible constant current output to drive LED lighting.

The POL-LYTxxx series of transformers and inductors are designed for use with the Power Integrations' LYTSwitch series of LED driver controllers. This combination of LYTSwitch controllers, POL-LYT series transformers and inductors, offers high efficiency (typically > 90%) and a tight constant current output that results in stable LED drive performance. Premier Magnetics' POL-LYT series of transformers and inductors have been optimized to provide solid LED drive performance using a cost effective design.

Schematic

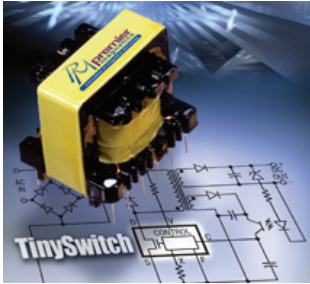


LED Lighting Applications Transformers and Inductors

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations		APPLICATION DATA		
	Doc#	Device	Input Volts	Output Volts @ Currents (A)	Output Power (W)
POL-LYT020	DER-350	LYT4317E	90-132	36V @ 0.550	20.0
POL-LYT021	DER-364	LYT4313E	90-132	41V @ 0.350	14.0
POL-LYT022	DER-347	LYT4313E	90-132	34V @ 0.370	12.6
POL-LYT023	DER-365	LYT4311E	190-265	41V @ 0.350	14.35
POL-LYT024	DER-366	LYT4314E	190-265	36V @ 0.550	20.0
POL-LYT025	DER-357	LYT4313E	90-132	72V @ 0.170	12.0
POL-LYT026	DER-353	LYT4314E	90-132	18V @ 0.530	9.5
POL-LYT027	DER-359	LYT4312E	90-132	36V @ 0.230	8.5
POL-LYT028	DER-360	LYT4311E	90-132	15V @ 0.500	7.5
POL-LYT029	DER-355	LYT4312E	90-265	54V @ 0.110	6.0
POL-LYT030	DER-412	LYT4322E	190-265	120V @ 0.110	12.0
POL-LYT031	DER-409	LYT4322E	190-265	72V @ 0.115	8.5
POL-LYT032	DER-406	LYT4322E	185-265	48V @ 0.120	5.75
PNK-10010	DER-277	LNK403EG	90-265	18V @ 0.380	7.0
PNK-10011	DER-281	LNK405EG	180-265	30V @ 0.50	15.0
PNK-10012	DER-263	LNK406EG	90-265	28V @ 0.50	14.0
PNK-10013	DER-286	LNK419EG	90-308	30V @ 1.0	30.0
PNK-10014	DER-290	LNK420EG	190-300	29V-36V @ 2.1	75.0
PNK-10015	DER-291	LNK420EG	180-277	30V-36V @ 4.2	150.0
PNK-10016	DER-296	LNK403EG	176-265	66V @ 0.112	7.4
PNK-10017	DER-298	LNK419EG	90-265	200V @ 0.09	18.0
PNK-10018	DER-302	LNK406VG	185-265	36V @ 0.200	7.2
PNK-10019	DER-303	LNK406VG	185-265	36V @ 0.200	7.2
PNK-10020	DER-304	LNK458KG	190-265	48V @ 0.093	4.5
PNK-10021	DER-305	LNK460VG	185-265	50V @ 0.200	10.0
PNK-10022	DER-306	LNK460VG	90-135	36V @ 0.278	10.0
PNK-10023	DER-314	LNK406VG	185-265	36V @ 0.425	15.3
PNK-10024	DER-315	LNK458VG	90-132	48V @ 0.093	4.5
PNK-10025	DER-322	LNK460VG	195-265	78V @ 0.230	18.0
PNK-10026	DER-323	LNK406VG	90-135	85V @ 0.200	18.0
PNK-10027	DER-324	LNK458DG	90-132	230V @ 0.030	7.0
PNK-10029	DER-328	LNK460KG	90-132	30V-36V @ 0.280	10.0
PNK-10030	DER-335	LNK456DG	190-265	100V @ 0.040	4.0
PNK-10031	DER-336	LNK460KG	195-265	145V @ 0.040	5.8
PNK-10032	DER-340	LNK419EG	90-300	54V @ 0.750	40.5
PNK-10033	DER-341	LNK407EG	90-132	40V @ 0.350 or 30V @ 0.480	14.5
PNK-10034	DER-344	LNK414EG	140-280	16V @ 0.800	12.8
PNK-10035	DER-351	LNK604DG	90-265	9V @ 0.330	3.0

Off-Line Switch Mode Transformers — TinySwitch™



— *Designed for Use with Power Integrations, Inc.
TinySwitch Series Off-Line Switcher Controllers —*

- ▶ Designed to meet a Universal Input of 85Vac to 265Vac, 47Hz to 440Hz
- ▶ Up to 6000Vrms of Isolation

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltage (Vdc)	Output Current (Amps)	VR1 Voltage Ref. (V)	Part Number	Manufacturer
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

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref(V)	Part Number	Manufacturer
PNY-05015*	TNY-264	3.5	1.5	3.0	1N5225B	Motorola
		4.0	1.25	3.3	1N5226B	Motorola
		4.2	0.99	3.6	1N5227B	Motorola
		4.6	1.08	3.9	1N5228B	Motorola
		5.0	0.96	4.3	1N5229B	Motorola
		5.4	0.88	4.7	1N5230B	Motorola
		5.8	0.93	5.1	1N5231B	Motorola
		6.2	0.99	5.6	1N5232B	Motorola
		6.7	0.81	6.0	1N5233B	Motorola
		7.2	0.87	6.2	1N5234B	Motorola
		7.4	0.90	6.8	1N5235B	Motorola
		8.4	0.69	7.5	1N5236B	Motorola
		9.1	0.53	8.2	1N5237B	Motorola
		10.0	0.30	9.1	1N5239B	Motorola
PNY-05015*	TNY-266	3.5	1.5	3.0	1N5225B	Motorola
		3.9	1.7	3.3	1N5226B	Motorola
		4.0	1.7	3.6	1N5227B	Motorola
		4.5	1.42	3.9	1N5228B	Motorola
		4.8	1.52	4.3	1N5229B	Motorola
		5.4	1.27	4.7	1N5230B	Motorola
		5.7	1.34	5.1	1N5231B	Motorola
		6.0	1.43	5.6	1N5232B	Motorola
		6.6	1.27	6.0	1N5233B	Motorola
		7.0	1.36	6.2	1N5234B	Motorola
		7.4	1.19	6.8	1N5235B	Motorola
		8.4	1.18	7.5	1N5236B	Motorola
		9.1	1.11	8.2	1N5237B	Motorola
		9.8	0.96	9.1	1N5239B	Motorola
		11.2	0.50	10.0	1N5240B	Motorola

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref(V)	Part Number	Manufacturer
PNY-05015*	TNY-267	3.5	1.5	3.0	1N5225B	Motorola
		3.9	1.7	3.3	1N5226B	Motorola
		4.0	1.8	3.6	1N5227B	Motorola
		4.4	1.9	3.9	1N5228B	Motorola
		4.9	1.5	4.3	1N5229B	Motorola
		5.3	1.6	4.7	1N5230B	Motorola
		5.6	1.7	5.1	1N5231B	Motorola
		6.1	1.4	5.6	1N5232B	Motorola
		6.5	1.5	6.0	1N5233B	Motorola
		6.9	1.6	6.2	1N5234B	Motorola
		7.3	1.4	6.8	1N5235B	Motorola
		8.2	1.3	7.5	1N5236B	Motorola
		8.9	0.97	8.2	1N5237B	Motorola
		9.6	0.67	9.1	1N5239B	Motorola
		11.3	0.56	10.0	1N5240B	Motorola
PNY-05015*	TNY-268	3.5	1.5	3.0	1N5225B	Motorola
		3.9	1.7	3.3	1N5226B	Motorola
		4.0	1.8	3.6	1N5227B	Motorola
		4.4	1.9	3.9	1N5228B	Motorola
		4.9	1.5	4.3	1N5229B	Motorola
		5.3	1.6	4.7	1N5230B	Motorola
		5.6	1.7	5.1	1N5231B	Motorola
		6.0	1.8	5.6	1N5232B	Motorola
		6.5	1.5	6.0	1N5233B	Motorola
		7.0	1.3	6.2	1N5234B	Motorola
		7.3	1.4	6.8	1N5235B	Motorola
		8.4	1.0	7.5	1N5236B	Motorola
		9.2	0.89	8.2	1N5237B	Motorola
		9.9	0.80	9.1	1N5239B	Motorola
		11.3	0.56	10.0	1N5240B	Motorola

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer
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

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer
PNY-07006*	TNY-264	4.7	0.9	3.9	1N5228B	Motorola
		5.0	0.8	4.3	1N5229B	Motorola
		5.5	0.88	4.7	1N5230B	Motorola
		5.9	0.82	5.1	1N5231B	Motorola
		6.2	0.76	5.6	1N5232B	Motorola
		6.7	0.82	6.0	1N5233B	Motorola
		7.2	0.79	6.2	1N5234B	Motorola
		7.5	0.73	6.8	1N5235B	Motorola
		8.5	0.69	7.5	1N5236B	Motorola
		9.1	0.64	8.2	1N5237B	Motorola
		9.9	0.61	8.7	1N5238B	Motorola
		11.3	0.51	10.0	1N5240B	Motorola
		12.3	0.41	11.0	1N5241B	Motorola
		12.3	0.43	12.0	1N5242B	Motorola
		13.9	0.43	13.0	1N5243B	Motorola
		14.4	0.39	14.0	1N5244B	Motorola
		16.3	0.29	15.0	1N5245B	Motorola
		17.5	0.24	16.0	1N5246B	Motorola
PNY-07006*	TNY-266	4.6	1.1	3.9	1N5228B	Motorola
		5.0	1.1	4.3	1N5229B	Motorola
		5.4	1.3	4.7	1N5230B	Motorola
		5.8	1.1	5.1	1N5231B	Motorola
		6.2	1.2	5.6	1N5232B	Motorola
		6.7	1.0	6.0	1N5233B	Motorola
		7.1	1.1	6.2	1N5234B	Motorola
		7.5	1.0	6.8	1N5235B	Motorola
		8.5	1.0	7.5	1N5236B	Motorola
		9.1	1.0	8.2	1N5237B	Motorola
		9.9	1.0	8.7	1N5238B	Motorola
		11.2	0.92	10.0	1N5240B	Motorola
		12.2	0.86	11.0	1N5241B	Motorola
		13.0	0.86	12.0	1N5242B	Motorola
		13.9	0.81	13.0	1N5243B	Motorola
		14.8	0.81	14.0	1N5244B	Motorola
		16.3	0.73	15.0	1N5245B	Motorola
		17.5	0.67	16.0	1N5246B	Motorola

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer
PNY-07006*	TNY-267	4.6	1.4	3.9	1N5228B	Motorola
		4.9	1.5	4.3	1N5229B	Motorola
		5.4	1.6	4.7	1N5230B	Motorola
		5.8	1.3	5.1	1N5231B	Motorola
		6.1	1.4	5.6	1N5232B	Motorola
		6.6	1.5	6.0	1N5233B	Motorola
		7.1	1.3	6.2	1N5234B	Motorola
		7.4	1.2	6.8	1N5235B	Motorola
		8.4	1.1	7.5	1N5236B	Motorola
		9.1	1.1	8.2	1N5237B	Motorola
		9.8	1.1	8.7	1N5238B	Motorola
		11.2	1.0	10.0	1N5240B	Motorola
		12.2	1.0	11.0	1N5241B	Motorola
		12.9	1.0	12.0	1N5242B	Motorola
		13.8	0.97	13.0	1N5243B	Motorola
		14.7	0.90	14.0	1N5244B	Motorola
		16.3	0.81	15.0	1N5245B	Motorola
		17.8	0.73	16.0	1N5246B	Motorola
PNY-07006*	TNY-268	4.6	1.44	3.9	1N5228B	Motorola
		4.9	1.54	4.3	1N5229B	Motorola
		5.3	1.6	4.7	1N5230B	Motorola
		5.8	1.3	5.1	1N5231B	Motorola
		6.1	1.4	5.6	1N5232B	Motorola
		6.6	1.2	6.0	1N5233B	Motorola
		7.1	1.3	6.2	1N5234B	Motorola
		7.3	1.4	6.8	1N5235B	Motorola
		8.4	1.3	7.5	1N5236B	Motorola
		9.0	1.2	8.2	1N5237B	Motorola
		9.8	1.1	8.7	1N5238B	Motorola
		11.2	1.08	10.0	1N5240B	Motorola
		12.1	1.0	11.0	1N5241B	Motorola
		12.9	1.0	12.0	1N5242B	Motorola
		13.8	0.96	13.0	1N5243B	Motorola
		14.7	0.90	14.0	1N5244B	Motorola
		16.3	0.85	15.0	1N5245B	Motorola
		18.7	0.77	16.0	1N5246B	Motorola

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer
PNY-24004*	TNY-255	26.9	0.30	24.0	1N5252B	Motorola
		22.7	0.42	20.0	1N5250B	Motorola
		21.1	0.46	19.0	1N5249B	Motorola
		18.4	0.50	17.0	1N5247B	Motorola
		17.6	0.53	16.0	1N5246B	Motorola
		16.0	0.55	15.0	1N5245B	Motorola
		13.7	0.64	13.0	1N5243B	Motorola
		12.6	0.70	12.0	1N5242B	Motorola
		12.0	0.72	11.0	1N5241B	Motorola
		9.9	0.77	9.1	1N5239B	Motorola
		7.5	0.92	6.8	1N5235B	Motorola
PNY-24004*	TNY-256	27.3	0.30	24.0	1N5252B	Motorola
		22.2	0.40	20.0	1N5250B	Motorola
		20.7	0.44	19.1	1N5249B	Motorola
		18.4	0.49	17.0	1N5247B	Motorola
		17.6	0.52	16.0	1N5246B	Motorola
		16.5	0.55	15.0	1N5245B	Motorola
		13.5	0.64	13.0	1N5243B	Motorola
		12.7	0.71	12.0	1N5242B	Motorola
		12.1	0.72	11.0	1N5241B	Motorola
		9.9	0.82	9.1	1N5239B	Motorola
		7.7	0.94	6.8	1N5235B	Motorola
PNY-24004*	TNY-264	24.0	0.044	24.0	1N5252B	Motorola
		22.3	0.048	20.0	1N5250B	Motorola
		20.7	0.080	19.0	1N5249B	Motorola
		18.5	0.20	17.0	1N5247B	Motorola
		18.0	0.22	16.0	1N5246B	Motorola
		16.4	0.27	15.0	1N5245B	Motorola
		14.0	0.34	13.0	1N5243B	Motorola
		13.1	0.39	12.0	1N5242B	Motorola
		12.4	0.44	11.0	1N5241B	Motorola
		9.9	0.52	9.1	1N5239B	Motorola
		7.5	0.67	6.8	1N5235B	Motorola

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	VR1 Voltages Ref (V)	Part Number	Manufacturer
PNY-24004*	TNY-267	23.9	0.40	24.0	1N5252B	Motorola
		22.0	0.51	20.0	1N5250B	Motorola
		20.4	0.67	19.0	1N5249B	Motorola
		18.2	0.75	17.0	1N5247B	Motorola
		18.0	0.81	16.0	1N5246B	Motorola
		16.3	0.89	15.0	1N5245B	Motorola
		13.8	1.0	13.0	1N5243B	Motorola
		12.9	1.0	12.0	1N5242B	Motorola
		12.2	1.1	11.0	1N5241B	Motorola
		9.8	1.2	9.1	1N5239B	Motorola
PNY-24004*	TNY-268	7.3	1.4	6.8	1N5235B	Motorola
		24.0	0.36	24.0	1N5252B	Motorola
		22.0	0.54	20.0	1N5250B	Motorola
		20.4	0.65	19.1	1N5249B	Motorola
		18.4	0.82	17.0	1N5247B	Motorola
		18.0	0.85	16.0	1N5246B	Motorola
		16.3	0.95	15.0	1N5245B	Motorola
		13.8	1.0	13.0	1N5243B	Motorola
		12.9	1.1	12.0	1N5242B	Motorola
		12.2	1.1	11.0	1N5241B	Motorola
PNY-24004*	TNY-268	9.8	1.2	9.1	1N5239B	Motorola
		7.3	1.4	6.8	1N5235B	Motorola

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	Power (Watts)
TSD-2122	TNY-264	1.8/3.3	0.8/0.5	3.1
PNY-03100	TNY-264	3.3/5.0	0.2/0.04	0.9
PNY-03512	TNY-276	3.0/5.0/+/-12.0	0.5/0.5/0.25/0.03	4.75
PNY-03513	TNY-276	3.0/5.0/+/-12.0	0.5/0.5/0.25/0.03	4.75
TSD-2540	TNY-269	3.8/18.0/30.0	2.5/0.25/0.25	21.5
PNY-05010	TNY-274	5.0	1.0	5.0
TSD-3143	TNY-274	5.0	2.5	12.5
TSD-1460*	TNY-254	5.0	0.5	2.5
PNY-05016*	PNY-05015 W/SHIELD	SEE DATA PAGE 16-18	SEE DATA PAGE 16-18	SEE DATA PAGE 16-18
PNY-05020	TNY-286	5.0	2.0	10.0
PNY-05030	TNY-279	5.0	3.0	15.0
PNY-05035	TNY-268	5.0	3.5	17.5
PNY-15000	TNY-266	5.0/15.0	0.05/0.5	7.75
PNY-05120	TNY-276	5.0/7.0	0.6/0.2	4.4
PNY-05121	TNY-276	5.0/12.0	0.6/0.2	5.4
TSD-2434	TNY-278	5.0/12.0/15.0	1.0/0.5/0.2	14.0
TSD-2490	TNY-278	5.0/12.0/15.0	1.0/0.5/0.2	14.0
PNY-12207	TNY-268	5.0/12.0/12.0	0.6/0.06/0.06	4.45
PNY-12512	TNY-379	5.0/12.0	0.4/1.0	4.45
PNY-51200	TNY-267	5.0/12.0	0.5/0.5	8.5
TSD-2553	TNY-274	5.0/24.0	0.10/0.05	1.7
PNY-24805	TNY-277	8.0/24.0	0.10/1.0	24.8
TSD-2068	TNY-264	9.0	0.34	3.06
TSD-2792	TNY-274	10.0	0.24	2.4
PNY-12010	TNY-287	12.0	1.0	12.0
PNY-12011	TNY-278	12.0	1.0	12.0
PNY-21204	TNY-277	12.0/12.0	0.4/0.4	9.6
PNY-12206*	TNY-256	12.0/12.0/5.0	0.06/0.06/0.60	4.45
PNY-12238*	TNY-267	12.0/12.0	0.38/0.38	9.15
PNY-12238A	TNY-267	12.0/12.0	0.38/0.38	9.15
TSD-2827	TNY-279	15.0	1.0	15.0
PNY-16070	TNY-278	16.0	0.70	11.2
TSD-2421	TNY-277	24.0	0.53	12.75
PNY-24008	TNY-287	24.0	0.8	19.2
PNY-24002	TNY-266	24.0	0.4	9.6
PNY-24001	TNY-289	24.7	0.89	22.0
TSD-2344	TNY-277	24.0/17.0	0.33/0.06	9.0
PNY-28005	TNY-280	28.0	0.50	14.0
TSD-2422	TNY-277	42.0	0.31	13.0
PNY-06010	TNY-286	6.1	1.0	6.6
PNY-12512	TNY-379	5.0/12.0	0.4/1.0	14.0

* Indicated Parts are UL Recognized Under UL file #E162344

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (Amp)	Power (Watts)
PNY-24511	TNY-287	5.0/24.0	1.0/0.25	11.0
PNY-24805	TNY-277	8.0/24.0	0.1/1.0	24.8
PNY-28605	TNY-286	5.0	1.4	7.0
PNY-28624	TNY-286	24.0	0.5	12.0
PNY-28517	TNY-285	5.0/12.0	0.20/0.06	1.76

Power Integrations Cross Reference Old IC to New IC

OLD TOPSwitch	NEW TOPSwitch
<u>TinySwitch Family</u> TNY253PN 2 W (85 - 265 VAC) 4 W (100/115/230 VAC) TNY253GN 2 W (85 - 265 VAC) 4 W (100/115/230 VAC) TNY253GN-TL 2 W (85 - 265 VAC) 4 W (100/115/230 VAC) TNY254PN 4 W (85 - 265 VAC) 5 W (100/115/230 VAC) TNY254GN 4 W (85 - 265 VAC) 5 W (100/115/230 VAC) TNY254GN-TL 4 W (85 - 265 VAC) 5 W (100/115/230 VAC) TNY255PN 6.5 W (85-265 VAC) 10 W (100/115/230 VAC) TNY255GN 6.5 W (85-265 VAC) 10 W (100/115/230 VAC) TNY255GN-TL 6.5 W (85-265 VAC) 10 W (100/115/230 VAC) TNY256PN 10 W (85-265 VAC) 15 W (100/115/230 VAC) TNY256GN 10 W (85-265 VAC) 15 W (100/115/230 VAC) TNY256GN-TL 10 W (85-265 VAC) 15 W (100/115/230 VAC) TNY256YN 10 W (85-265 VAC) 15 W (100/115/230 VAC)	<u>TinySwitch-III Family</u> TNY274PN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN-TL 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274PN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN-TL 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274PN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN-TL 8.5 W (85-265 VAC) 11 W (230 VAC) TNY275PN 11.5 W (85-265 VAC) 15 W (230 VAC) TNY275GN 11.5 W (85-265 VAC) 15 W (230 VAC) TNY275GN-TL 11.5 W (85-265 VAC) 15 W (230 VAC) N/A
<u>TinySwitch-II Family</u> TNY263PN 4.7 W (85-265 VAC) 7.5 W (230 VAC) TNY263PG 4.7 W (85-265 VAC) 7.5 W (230 VAC) TNY263GN 4.7 W (85-265 VAC) 7.5 W (230 VAC) TNY263GN-TL 4.7 W (85-265 VAC) 7.5 W (230 VAC) TNY264PN 6 W (85-265 VAC) 9 W (230 VAC) TNY264PG 6 W (85-265 VAC) 9 W (230 VAC) TNY264GN 6 W (85-265 VAC) 9 W (230 VAC) TNY264GN-TL 6 W (85-265 VAC) 9 W (230 VAC) TNY265PN 7.5 W (85-265 VAC) 11 W (230 VAC) TNY265PG 7.5 W (85-265 VAC) 11 W (230 VAC) TNY265GN 7.5 W (85-265 VAC) 11 W (230 VAC) TNY265GN-TL 7.5 W (85-265 VAC) 11 W (230 VAC) TNY266PN 9.5 W (85-265 VAC) 15 W (230 VAC) TNY266PG 9.5 W (85-265 VAC) 15 W (230 VAC) TNY266GN 9.5 W (85-265 VAC) 15 W (230 VAC) TNY266GN-TL 9.5 W (85-265 VAC) 15 W (230 VAC) TNY267PN 12 W (85-265 VAC) 19 W (230 VAC) TNY267PG 12 W (85-265 VAC) 19 W (230 VAC) TNY267GN 12 W (85-265 VAC) 19 W (230 VAC) TNY267GN-TL 12 W (85-265 VAC) 19 W (230 VAC) TNY268PN 15 W (85-265 VAC) 23 W (230 VAC) TNY268GN 15 W (85-265 VAC) 23 W (230 VAC) TNY268GN-TL 15 W (85-265 VAC) 23 W (230 VAC)	<u>TinySwitch-III Family</u> TNY274PN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274PG 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN-TL 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274PN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274PG 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN 8.5 W (85-265 VAC) 11 W (230 VAC) TNY274GN-TL 8.5 W (85-265 VAC) 11 W (230 VAC) TNY276PN 15 W (85-265 VAC) 19 W (230 VAC) TNY276PG 15 W (85-265 VAC) 19 W (230 VAC) TNY276GN 15 W (85-265 VAC) 19 W (230 VAC) TNY276GN-TL 15 W (85-265 VAC) 19 W (230 VAC) TNY276PN 15 W (85-265 VAC) 19 W (230 VAC) TNY276PG 15 W (85-265 VAC) 19 W (230 VAC) TNY276GN 15 W (85-265 VAC) 19 W (230 VAC) TNY276GN-TL 15 W (85-265 VAC) 19 W (230 VAC) TNY277PN 18 W (85-265 VAC) 23.5 W (230 VAC) TNY277GN 18 W (85-265 VAC) 23.5 W (230 VAC) TNY277GN-TL 18 W (85-265 VAC) 23.5 W (230 VAC)

Off-Line Switch Mode Transformers — LinkSwitch™



— Designed for Use with Power Integrations, Inc. LinkSwitch Series of Off-Line Switcher Controllers —

- ▶ Designed to Meet the Universal AC Input of 85Vac to 265Vac at 47Hz to 400Hz
- ▶ Up to 6000Vac of Isolation (Hipot)
- ▶ Class B 130°C, Class F 155°C Insulation System

ELECTRICAL RATINGS AT 25°C

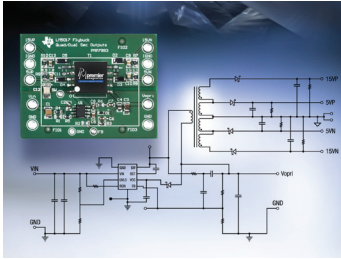
PART NUMBER	Power Integrations Controller	Output Voltages (Vdc)	Output Currents (mA)	Output Power (Watts)
PNK-30001	LNK-304	12.0	250.0	3.0
PNK-36001	LNK-364	5.0/18.0	100.0/300.0	5.9
PNK-36002	LNK-363	5.0	550.0	2.75
PNK-36003	LNK-363	7.0/-5.0	175.0/300.0	2.7/4.15
PNK-36004	LNK-363	5.0	600.0	3.0
PNK-36005	LNK-362	6.2	322.0	2.0
PNK-50101	LNK-501	18.0	175.0	3.2
PNK-52001	LNK-520	5.0	480.0	2.4
PNK-55035	LNK-304	5.0/5.0	350.0/350.0	3.5
PNK-56001	LNK-564	2.0	1500.0	3.0
PNK-56002	LNK-520	12.0	260.0	3.1
PNK-56003	LNK-564	9.0	220.0	2.0
PNK-56004	LNK-564	6.0	330.0	2.0
PNK-56005	LNK-574	6.0	350.0	2.1
PNK-60001	LNK-606	7.6	700.0	5.3
PNK-61001	LNK-616	5.0	1000.0	5.0
PNK-62001	LNK-625	5.0	1200.0	6.0
PNK-62002	LNK-625	5.0/12.0/-22.0	1200.0/100.0/15.0	7.0
PNK-62003	LNK-625	12.0	400.0	4.8
PNK-70001	LNK-616	5.0	1000.0	5.0
PNK-80012	LNK-625	12.0	300.0	3.6
TSD-1992	LNK-501	5.5	500.0	2.75
TSD-2094	LNK-501	5.0	150.0	0.75
TSD-2349	LNK-520	5.0	550.0	2.75
PNK-36208	LNK-362	8.0	210.0	16.8
PNK-36212	LNK-363	5.0	600.0	3.0
PNK-36435	LNK-364	12.0	300.0	3.6
PNK-36436	LNK-364	12.0	300.0	3.6
PNK-62353	LNK-623	5.0	560.0	2.8
PNK-62624	LNK-626	24.0	350.0	8.4
PNK-66645	LNK-6664	5.0	3000.0	15.0
PNK-66645S	LNK-6664	5.0	3000.0	15.0
PNK-67636S	LNK-6763	6.0	2500.0	15.0
PNK-67751	LNK-6775	12.0	2000.0	24.0

Power Integrations LinkSwitch Cross Reference - Old IC to New IC

OLD TOPSwitch	NEW TOPSwitch
LinkSwitch-HF Family LNK353PN 3 W (85-265 VAC) 4 W (230 VAC) LNK353GN 3 W (85-265 VAC) 4 W (230 VAC) LNK353GN-TL 3 W (85-265 VAC) 4 W (230 VAC) LNK354PN 4.5 W (85-265 VAC) 5 W (230 VAC) LNK354GN 4.5 W (85-265 VAC) 5 W (230 VAC) LNK354GN-TL 4.5 W (85-265 VAC) 5 W (230 VAC)	LinkSwitch-XT Family LNK362PN 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN-TL 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK363PN 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN-TL 4.7 W (85-265 VAC) 7.5 W (230 VAC)
LinkSwitch Family LNK500PN 3 W (85-265 VAC) 4 W (230 VAC) LNK500GN 3 W (85-265 VAC) 4 W (230 VAC) LNK500GN-TL 3 W (85-265 VAC) 4 W (230 VAC) LNK501PN 3 W (85-265 VAC) 4 W (230 VAC) LNK501GN 3 W (85-265 VAC) 4 W (230 VAC) LNK501GN-TL 3 W (85-265 VAC) 4 W (230 VAC) LNK520PN 3 W (85-265 VAC) 4 W (230 VAC) LNK520GN 3 W (85-265 VAC) 4 W (230 VAC) LNK520GN-TL 3 W (85-265 VAC) 4 W (230 VAC)	LinkSwitch-XT Family LNK362PN 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362PG 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN-TL 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN-TL 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362PN 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362PG 2.6 W (85-265 VAC) 2.8 W (230 VAC) LNK362GN-TL 2.6 W (85-265 VAC) 2.8 W (230 VAC)
LinkSwitch Family LNK500PN 3 W (85-265 VAC) 4 W (230 VAC) LNK500GN 3 W (85-265 VAC) 4 W (230 VAC) LNK500GN-TL 3 W (85-265 VAC) 4 W (230 VAC) LNK501PN 3 W (85-265 VAC) 4 W (230 VAC) LNK501GN 3 W (85-265 VAC) 4 W (230 VAC) LNK501GN-TL 3 W (85-265 VAC) 4 W (230 VAC) LNK520PN 3 W (85-265 VAC) 4 W (230 VAC) LNK520GN 3 W (85-265 VAC) 4 W (230 VAC) LNK520GN-TL 3 W (85-265 VAC) 4 W (230 VAC)	LinkSwitch-XT Family LNK363PN 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363PG 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN-TL 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN-TL 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363PN 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363PG 4.7 W (85-265 VAC) 7.5 W (230 VAC) LNK363GN-TL 4.7 W (85-265 VAC) 7.5 W (230 VAC)

The purpose of the above table is to accelerate time to prototype and provide a solid foundation from which to begin finalizing your production circuit design. It is the user's responsibility to confirm IC compatibility and circuit functionality.

Fly-Buck™ Solution Multiple Output Transformers for Texas Instruments LM5017



— Designed for Use with Texas Instruments, Inc. LM5017 Fly-Buck Solution Controller —

- Dual Output (EP10 SMD) and Quad Output (EP13 SMD) Configurations
- 1500Vrms Isolation
- Excellent leakage Inductance and Interwinding Capacitance

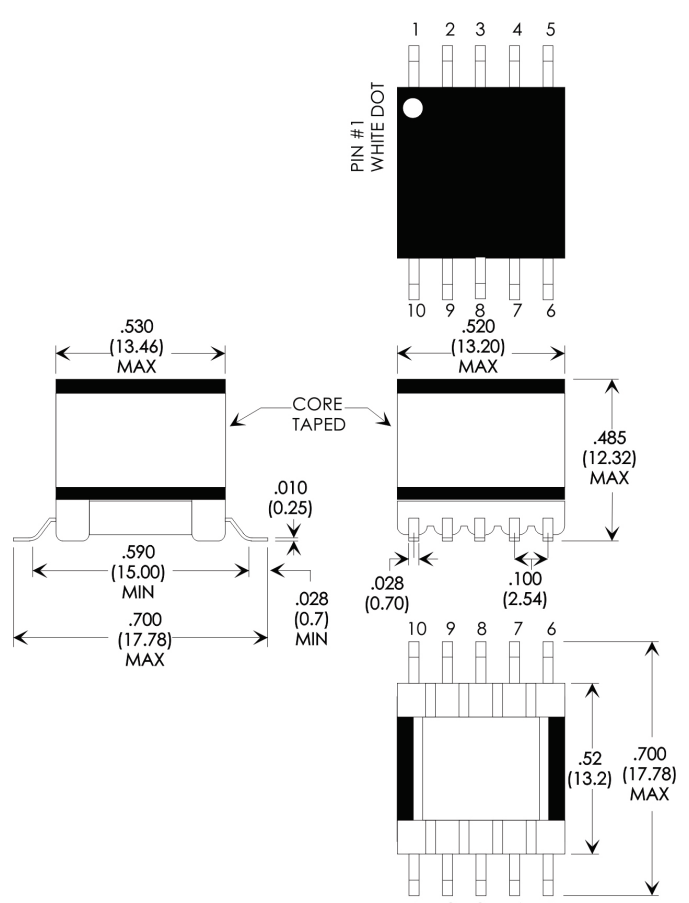
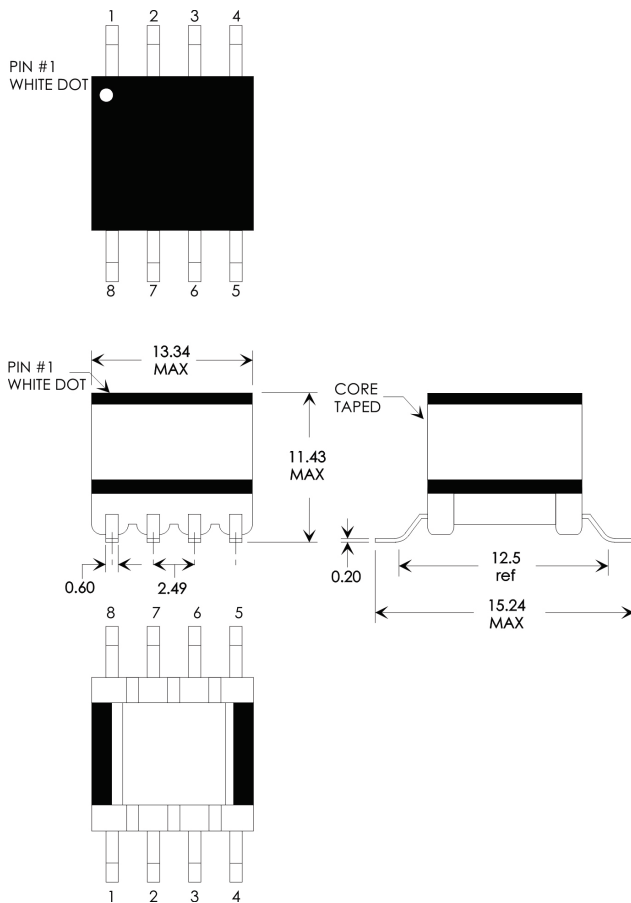
ELECTRICAL RATINGS AT 25°C

Part Number	Vin(Vac)	L(mH)	Isat(A)	F(kHz)	Np:Ns:Na	Vout(V) @Iout(A)	Hipot(kVac)	Size	Schematic
TSD-3424	15-40	0.05	1.5	300-600	1.5 : 1 : 2	+5 @0.10/+15 @0.05	1500	EP13	A
TSD-3425	15-40	0.05	1.3	250-600	1.5 : 1	+5 @0.25	1500	EP10	B
TSD-3426	15-40	0.05	1.2	250-600	2 : 1	+15 @0.15	1500	EP10	C

EP10

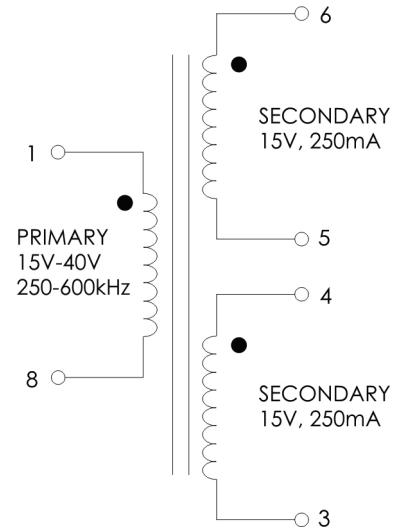
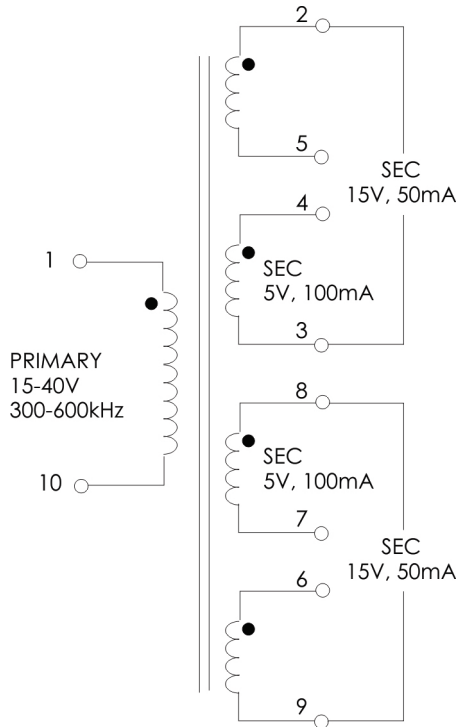
MECHANICAL DIMENSIONS

EP13

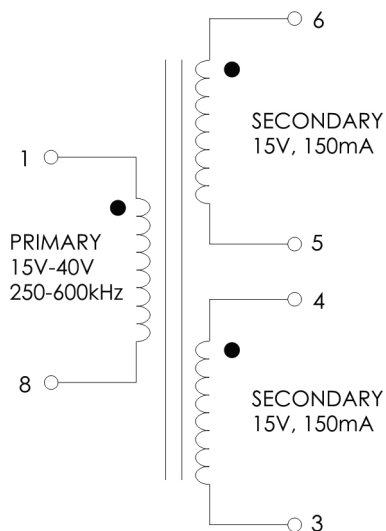


Fly-Buck™ Solution Multiple Output Transformers for Texas Instruments LM5017

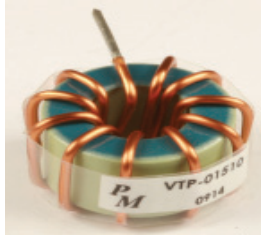
A	SCHEMATIC	B
---	-----------	---



C	SCHEMATIC	
---	-----------	--



Low Cost Toroidal Power Inductors



— Design Optimized for Use as High Frequency DC Chokes —

- Temperature Rise Data: Ripple Currents <10% @ 100kHz

Notes: 1) Temperature Rise T1 and T2 are Calculated
2) I1 Represents a 1%-20% Drop in Inductance Ln (nom.Ind. @ 0 Adc)
3) I2 Represents a 20%-40% Drop in Inductance Ln

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Ln (μH)	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
VTP-00301	3.0	0.020	3.0	1.0	10.0	2.8	2.0	30.0	0.32	0.15	0.13	0.30	0.016
VTP-01001	10.0	0.032	10.0	1.0	12.0	9.0	2.0	46.0	0.33	0.24	0.22	0.31	0.013
VTP-02001	20.0	0.035	20.0	1.0	7.0	17.0	2.0	27.0	0.46	0.25	0.23	0.43	0.018
VTP-05001	50.0	0.061	46.0	1.0	6.0	40.0	2.0	23.0	0.60	0.32	0.30	0.57	0.020
VTP-10001	100.0	0.106	91.0	1.0	9.0	75.0	2.0	34.0	0.60	0.46	0.43	0.57	0.018
VTP-12001	120.0	0.075	115.0	1.0	5.0	102.0	2.0	14.0	0.95	0.53	0.45	0.90	0.025
VTP-25001	250.0	0.168	229.0	1.0	7.0	188.0	2.0	27.0	0.93	0.46	0.44	0.90	0.020
VTP-01002	10.0	0.016	10.0	2.0	12.0	8.0	4.0	48.0	0.47	0.26	0.24	0.44	0.022
VTP-02002	20.0	0.024	18.0	2.0	11.0	14.0	4.0	43.0	0.61	0.27	0.24	0.58	0.025
VTP-05002	50.0	0.031	48.0	2.0	5.0	41.0	4.0	20.0	0.95	0.49	0.45	0.91	0.032
VTP-07002	70.0	0.039	61.0	2.0	11.0	48.0	4.0	43.0	0.82	0.36	0.31	0.82	0.025
VTP-10002	100.0	0.043	89.0	2.0	6.0	72.0	4.0	24.0	0.95	0.63	0.59	0.91	0.032
VTP-25002	250.0	0.068	222.0	2.0	6.0	178.0	4.0	24.0	1.24	0.71	0.67	1.20	0.032
VTP-01005	10.0	0.006	10.0	5.0	6.0	8.0	10.0	22.0	1.00	0.53	0.47	0.93	0.051
VTP-02005	20.0	0.008	18.0	5.0	7.0	14.0	10.0	27.0	1.00	0.67	0.61	0.93	0.051
VTP-05005	50.0	0.013	47.0	5.0	7.0	36.0	10.0	27.0	1.29	0.75	0.69	1.22	0.051
VTP-10005	100.0	0.023	83.0	5.0	11.0	61.0	10.0	44.0	1.54	0.59	0.53	1.48	0.051
VTP-15005	150.0	0.029	122.0	5.0	9.0	90.0	10.0	34.0	1.85	0.75	0.69	1.79	0.051
VTP-20005	200.0	0.033	155.0	5.0	10.0	109.0	10.0	39.0	1.85	0.75	0.69	1.79	0.051
VTP-30005	300.0	0.038	241.0	5.0	14.0	175.0	10.0	36.0	2.18	1.00	0.84	2.10	0.051
VTP-02007	20.0	0.005	16.0	7.0	9.0	12.0	14.0	33.0	1.02	0.70	0.62	0.95	0.064
VTP-05007	50.0	0.009	42.0	7.0	8.0	31.0	14.0	30.0	1.58	0.63	0.55	1.50	0.064
VTP-10007	100.0	0.015	78.0	7.0	9.0	55.0	14.0	34.0	1.88	0.78	0.70	1.80	0.064
VTP-15007	150.0	0.025	145.0	7.0	7.0	110.0	14.0	26.0	2.35	1.25	1.18	2.28	0.064
VTP-20007	200.0	0.030	177.0	7.0	8.0	131.0	14.0	29.0	2.35	1.25	1.18	2.28	0.064
VTP-03408	34.0	0.008	26.0	8.0	16.0	22.0	12.0	30.0	1.25	0.62	0.55	1.23	0.055
VTP-00510	5.0	0.005	5.0	10.0	12.0	4.0	16.0	25.0	1.03	0.70	0.65	0.95	0.064
VTP-01510	15.0	0.004	12.0	10.0	40.0	11.0	14.0	50.0	1.33	0.80	0.71	1.24	0.064
VTP-05010	50.0	0.010	40.0	10.0	12.0	32.0	16.0	31.0	1.87	0.78	0.70	1.80	0.064
VTP-25010	250.0	0.027	152.0	10.0	32.0	125.0	14.0	50.0	2.19	1.10	0.85	2.10	0.055
TSD-904	1.4	0.0017	1.2	11.0	25.0	1.0	15.0	40.0	0.75	0.40	0.27	n/a	0.051
VTP-07012	70.0	0.009	60.0	12.0	15.0	54.0	16.0	23.0	2.21	0.98	0.88	2.12	0.018
VTP-01020	11.0	0.0025	8.5	20.0	30.0	7.5	25.0	42.0	1.45	0.85	0.73	1.26	0.080
VTP-01025	12.0	0.0023	9.4	25.0	27.0	8.7	30.0	33.0	2.25	0.95	0.75	1.85	0.100

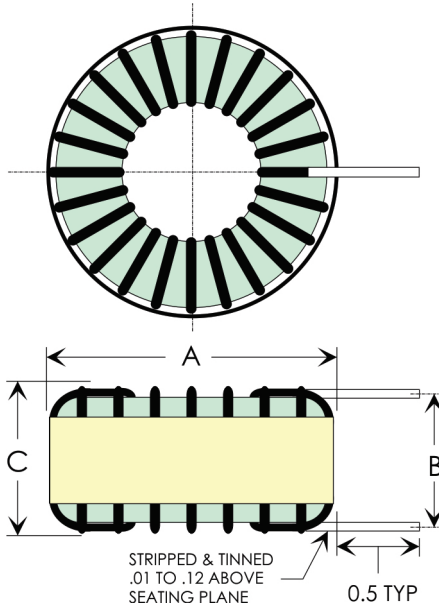
Low Cost Toroidal Power Inductors

VTP-xxxxx Style

MECHANICAL SPECIFICATIONS

HTP-xxxxx Style

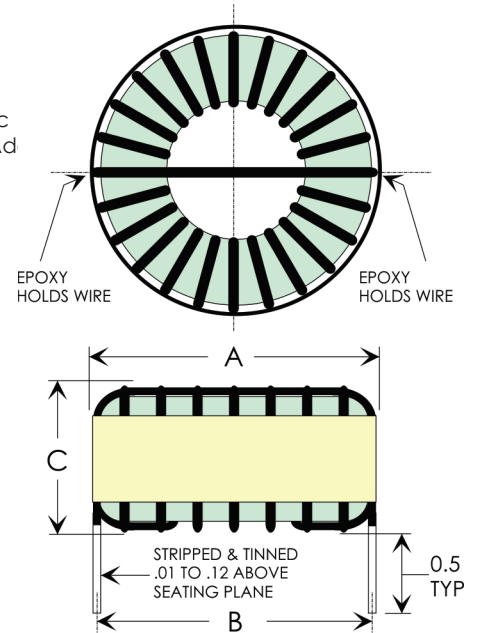
VTP-xxxxx OUTLINE VERTICAL MOUNT



HORIZONTAL OR VERTICAL MOUNT:

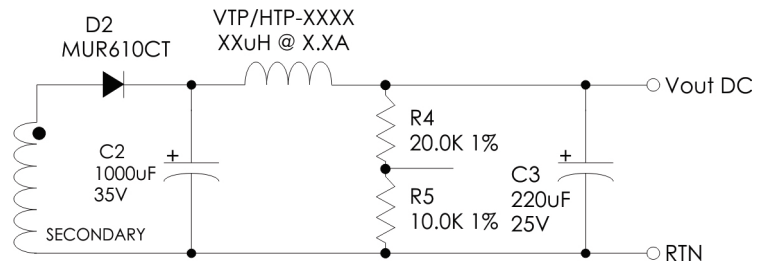
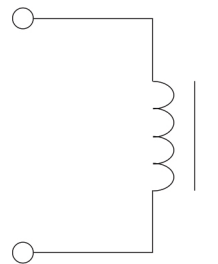
Table Part Numbers are Vertical Mount.
Change the "V" to "H" for Horizontal Mount.
Example:
VTP-05001 = Vertical Mount 50uH, 1.0Adc
HTP-05001 = Horizontal Mount 50uH, 1.0Adc

HTP-xxxxx OUTLINE HORIZONTAL MOUNT



SCHEMATIC

APPLICATION



FOR INTERMEDIATE VALUES OR CUSTOM DESIGNS CONSULT OUR SALES DEPARTMENT

Sendust Toroidal Power Inductors



— Design Optimized for Use as High Frequency DC Chokes —

- Temperature Rise Data: Ripple Currents <10% @ 100kHz

Notes: 1) Temperature Rise T1 and T2 are Calculated
2) I1 Represents a 1%-20% Drop in Inductance Ln (nom.Ind. @ 0 Adc)
3) I2 Represents a 20%-40% Drop in Inductance Ln

ELECTRICAL RATINGS AT 25°C

PART NUMBER	Ln (μH)	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-01001	10.0	0.024	10.0	1.0	12.0	8.0	2.0	47.0	0.31	0.16	0.14	0.29	0.014
VTK-02001	20.0	0.030	18.0	1.0	9.0	13.0	2.0	36.0	0.38	0.18	0.16	0.36	0.016
VTK-05001	50.0	0.054	42.0	1.0	10.0	31.0	2.0	39.0	0.48	0.21	0.19	0.46	0.016
VTK-10001	100.0	0.102	82.0	1.0	12.0	57.0	2.0	46.0	0.59	0.25	0.23	0.57	0.016
VTK-15001	150.0	0.091	127.0	1.0	6.0	96.0	2.0	24.0	0.76	0.32	0.30	0.74	0.020
VTK-25001	250.0	0.171	210.0	1.0	9.0	154.0	2.0	33.0	0.92	0.32	0.30	0.90	0.018
VTK-01002	10.0	0.008	9.0	2.0	6.0	7.0	4.0	23.0	0.51	0.24	0.21	0.48	0.025
VTK-02002	20.0	0.012	17.0	2.0	5.0	12.0	4.0	20.0	0.63	0.28	0.25	0.59	0.032
VTK-05002	50.0	0.032	37.0	2.0	17.0	22.0	4.0	66.0	0.60	0.26	0.24	0.58	0.0225
VTK-10002	100.0	0.043	79.0	2.0	9.0	53.0	4.0	33.0	0.95	0.34	0.31	0.92	0.0285
VTK-15002	150.0	0.053	117.0	2.0	8.0	80.0	4.0	30.0	1.06	0.40	0.36	1.03	0.0285
VTK-25002	250.0	0.053	205.0	2.0	5.0	150.0	4.0	21.0	1.24	0.56	0.52	1.20	0.032
VTK-01005	10.0	0.005	9.0	5.0	6.0	7.0	10.0	22.0	1.00	0.39	0.33	0.94	0.051
VTK-02005	20.0	0.006	16.0	5.0	6.0	12.0	10.0	22.0	1.11	0.45	0.39	1.05	0.051
VTK-05005	50.0	0.010	36.0	5.0	9.0	20.0	10.0	36.0	1.11	0.45	0.39	1.05	0.051
VTK-10005	100.0	0.021	80.0	5.0	8.0	57.0	10.0	33.0	1.67	0.57	0.51	1.61	0.051
VTK-15005	150.0	0.026	124.0	5.0	8.0	90.0	10.0	30.0	1.85	0.75	0.69	1.79	0.050
VTK-20005	200.0	0.030	154.0	5.0	9.0	108.0	10.0	35.0	1.85	0.75	0.69	1.79	0.051
VTK-30005	312.0	0.037	258.0	5.0	11.0	194.0	10.0	32.0	2.18	1.00	0.84	2.10	0.051
VTK-02007	20.0	0.004	18.0	7.0	5.0	13.0	14.0	19.0	1.32	0.63	0.56	1.24	0.064
VTK-05007	50.0	0.010	41.0	7.0	8.0	29.0	14.0	29.0	1.70	0.60	0.53	1.63	0.064
VTK-10007	100.0	0.013	78.0	7.0	8.0	54.0	14.0	30.0	1.88	0.78	0.70	1.80	0.064
VTK-15007	150.0	0.020	128.0	7.0	7.0	96.0	14.0	28.0	2.18	0.95	0.86	2.10	0.064
VTK-20007	200.0	0.025	168.0	7.0	8.0	120.0	14.0	32.0	2.18	0.95	0.86	2.10	0.064
VTK-05010	50.0	0.006	40.0	10.0	7.0	33.0	16.0	18.0	1.91	0.81	0.72	1.82	0.064
VTK-25010	250.0	0.027	167.0	10.0	26.0	122.0	16.0	50.0	2.19	1.10	0.85	2.10	0.057
VTK-07012	70.0	0.009	60.0	12.0	14.0	55.0	16.0	20.0	2.21	0.98	0.88	2.12	0.080
VTK-01025	12.0	0.0023	9.4	25.0	26.0	8.7	30.0	32.0	2.25	0.95	0.75	1.85	0.100

ELECTRICAL RATINGS AT 25°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	10.0	7.37	0.01	9.0	1.7	15.0	8.0	3.3	40.0	0.31	0.16	0.14	0.29	0.036
VTK-00002	25.0	5.2	0.02	22.5	1.0	15.0	20.0	1.9	40.0	0.38	0.18	0.16	0.36	0.032
VTK-00003	50.0	3.95	0.035	45.0	0.7	15.0	40.0	1.3	40.0	0.48	0.21	0.19	0.46	0.028
VTK-00004	75.0	3.5	0.045	67.5	0.6	15.0	60.0	1.1	40.0	0.59	0.25	0.23	0.57	0.025
VTK-00005	100.0	3.15	0.055	90.0	0.5	15.0	80.0	0.95	40.0	0.76	0.32	0.3	0.74	0.025
VTK-00006	150.0	2.35	0.10	135.0	0.4	15.0	120.0	0.75	35.0	0.92	0.32	0.3	0.9	0.02
VTK-00007	200.0	1.98	0.14	180.0	0.35	15.0	160.0	0.65	35.0	0.51	0.24	0.21	0.48	0.018
VTK-00008	250.0	1.85	0.16	225.0	0.3	15.0	200.0	0.6	35.0	0.63	0.28	0.25	0.59	0.018
VTK-00009	330.0	1.7	0.19	297.0	0.27	15.0	264.0	0.5	35.0	0.6	0.26	0.24	0.58	0.018

VTK-xxxxx Style

MECHANICAL SPECIFICATIONS

HTK-xxxxx Style

VTK-xxxxx OUTLINE VERTICAL MOUNT

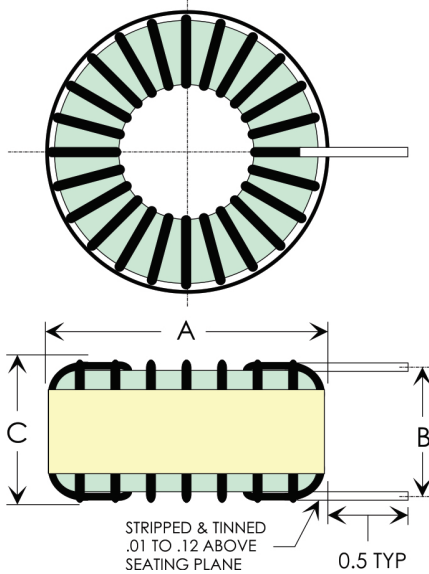
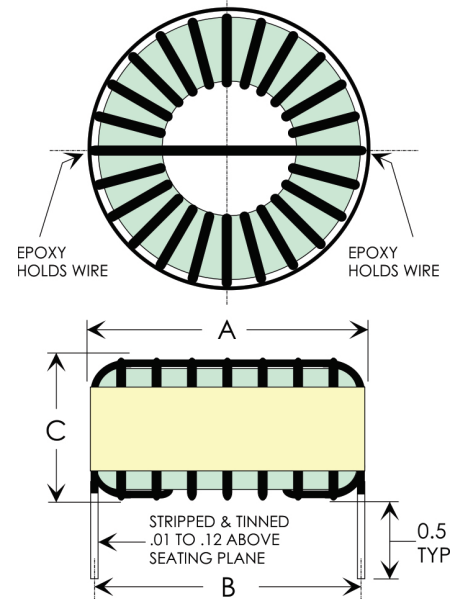
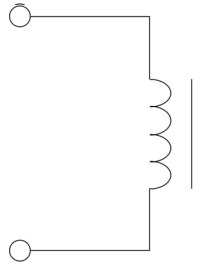


Table Part Numbers are Vertical Mount. Change the "V" to "H" for Horizontal Mount.
Example:
VTK-05001 = Vertical Mount 50uH, 1.0Adc
HTK-05001 = Horizontal Mount 50uH, 1.0Adc

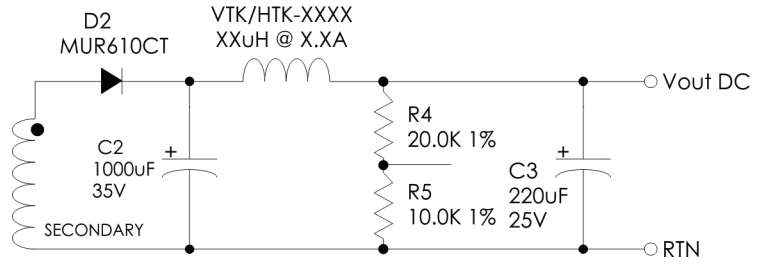
HTK-xxxxx OUTLINE HORIZONTAL MOUNT



SCHEMATIC

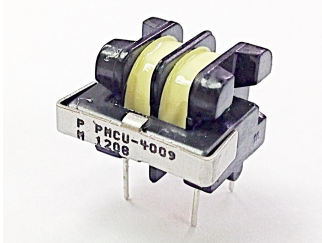


APPLICATION



FOR INTERMEDIATE VALUES OR CUSTOM DESIGNS CONSULT OUR SALES DEPARTMENT

EMI/RFI Common Mode Line Filters



— Designed for Low Power AC Input Line Filtering —

- ▶ Rated for Input Voltage up to 250Vac and 45Hz to 450Hz
- ▶ Low Profile Horizontal Construction
- ▶ 3750Vrms Isolation and 1000 MOhm Insulation Resistance @ 500Vdc
- ▶ Temperature Rise $\leq 30^{\circ}\text{C}$ at Rated Current

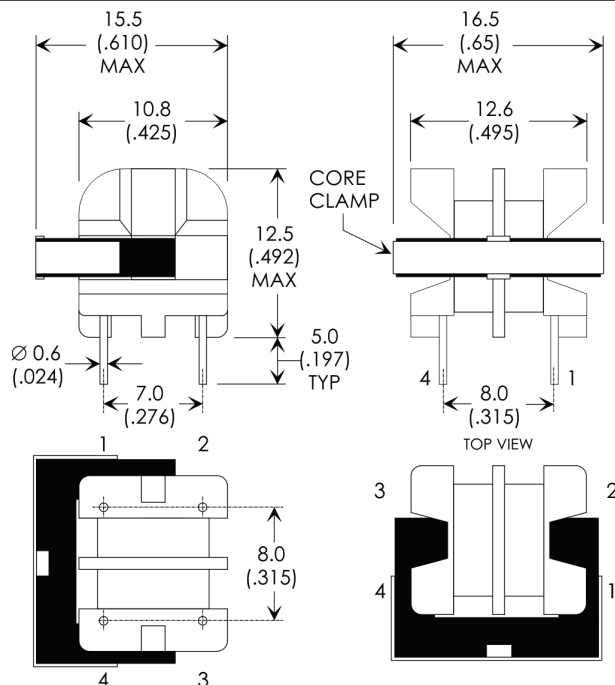
ELECTRICAL RATINGS AT 25°C

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	150.0	17.25	34.5	47.0	6.9	U9.8
PMCU-4330	200.0	23.0	46.0	33.0	5.5	U9.8
PMCU-4220	250.0	28.75	57.5	22.0	3.7	U9.8
PMCU-4100	350.0	40.25	80.5	10.0	1.4	U9.8
PMCU-4056	450.0	51.75	103.5	5.6	0.75	U9.8
PMCU-4033	600.0	69.0	138.0	3.3	0.5	U9.8
PMCU-4015	800.0	92.0	184.0	1.5	0.3	U9.8
PMCU-4009	1000.0	115.0	230.0	0.9	0.16	U9.8
PMCU-4005	1500.0	172.5	345.0	0.5	0.12	U9.8
PMCU-4002	2000.0	230.0	460.0	0.2	0.06	U9.8
PMCU-4001	3000.0	345.0	690.0	0.1	0.03	U9.8

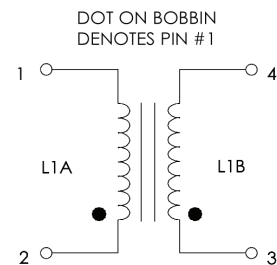
Notes:

- (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 SPECIFICATIONS

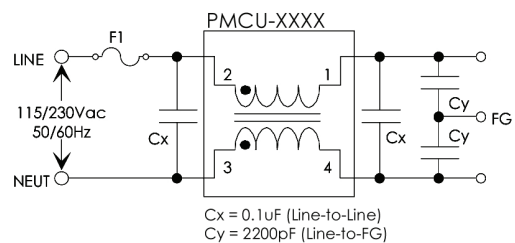


SCHEMATIC

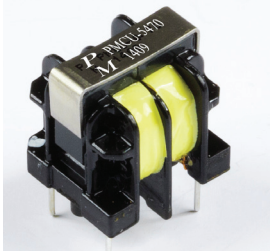


Note: Part is reversible and can be inserted in PCB either way

TYPICAL APPLICATION



EMI/RFI Common Mode Line Filters



— Designed for Low Power AC Input Line Filtering —

- ▶ Rated for Input Voltage up to 250Vac and 45Hz to 450Hz
- ▶ Low Profile Horizontal Construction
- ▶ 3750Vrms Isolation and 1000 MOhm Insulation Resistance @ 500Vdc
- ▶ Temperature Rise $\leq 30^{\circ}\text{C}$ at Rated Current

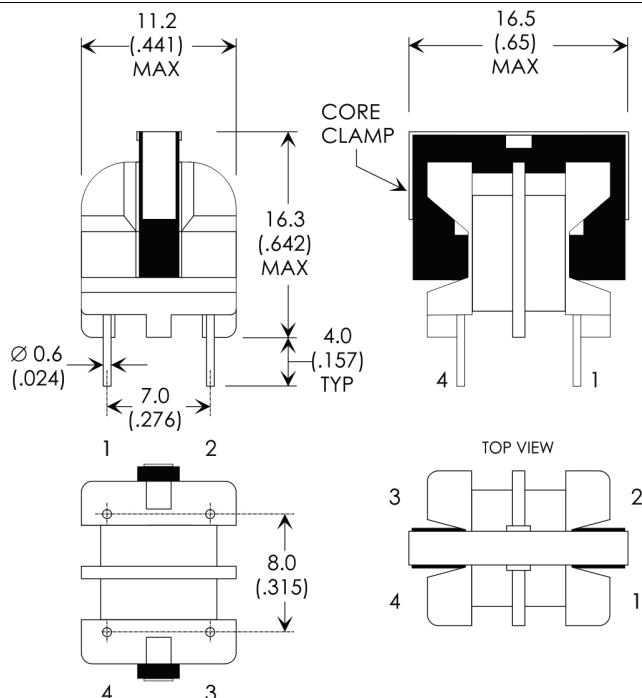
ELECTRICAL RATINGS AT 25°C

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	150.0	17.25	34.5	47.0	6.9	U9.8
PMCU-5330	200.0	23.0	46.0	33.0	4.95	U9.8
PMCU-5220	250.0	28.75	57.5	22.0	3.7	U9.8
PMCU-5100	350.0	40.25	80.5	10.0	1.4	U9.8
PMCU-5056	450.0	51.75	103.5	5.6	0.75	U9.8
PMCU-5033	600.0	69.0	138.0	3.3	0.5	U9.8
PMCU-5015	800.0	92.0	184.0	1.5	0.3	U9.8
PMCU-5009	1000.0	115.0	230.0	0.9	0.16	U9.8
PMCU-5005	1500.0	172.5	345.0	0.5	0.12	U9.8
PMCU-5002	2000.0	230.0	460.0	0.2	0.06	U9.8
PMCU-5001	3000.0	345.0	690.0	0.1	0.03	U9.8

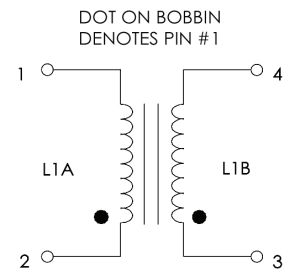
Notes:

- (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 SPECIFICATIONS

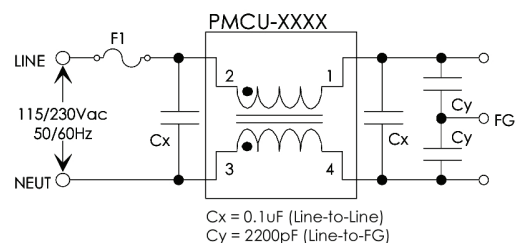


SCHEMATIC

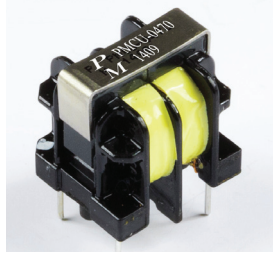


Note: Part is reversible and can be inserted in PCB either way

TYPICAL APPLICATION



EMI/RFI Common Mode Line Filters



— Designed for Medium Power AC Input Line Filtering —

- ▶ Rated for Input Voltage up to 250Vac and 45Hz to 450Hz
- ▶ Low Profile Horizontal Construction
- ▶ 3750Vrms Isolation and 1000 MOhm Insulation Resistance @ 500Vdc
- ▶ Temperature Rise $\leq 50^{\circ}\text{C}$ at Rated Current

ELECTRICAL RATINGS AT 25°C

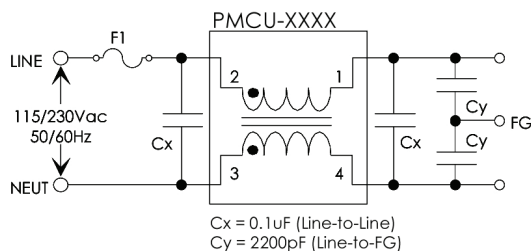
PART NUMBER	RATED RMS Current (Amps rms)	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		115V	230V			
PMCU-0470	0.35	40.25	80.5	47.0	2.4	U10.5
PMCU-0330	0.4	46.0	92.0	33.0	2.0	U10.5
PMCU-0220	0.5	57.5	115.0	22.0	1.2	U10.5
PMCU-0100	0.65	74.75	149.5	10.0	0.75	U10.5
PMCU-0056	1.0	115.0	230.0	5.6	0.4	U10.5
PMCU-0033	1.2	138.0	276.0	3.3	0.25	U10.5
PMCU-0015	1.8	207.0	414.0	1.5	0.11	U10.5
PMCU-2470	0.5	57.5	115.0	47.0	1.35	U16
PMCU-2330	0.6	69.0	138.0	33.0	1.0	U16
PMCU-2220	0.75	86.25	172.5	22.0	0.6	U16
PMCU-2100	1.0	115.0	230.0	10.0	0.34	U16
PMCU-2056	1.4	161.0	322.0	5.6	0.15	U16
PMCU-2033	2.0	230.0	460.0	3.3	0.1	U16
PMCU-2015	2.7	287.5	575.0	1.5	0.04	U16

Notes:

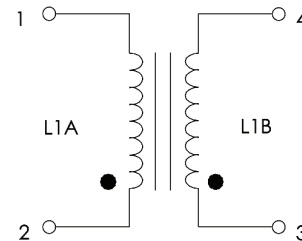
- (1) Temperature Rise is specified at maximum continuous current. Lower currents will result in reduced temperature rise. Design point is $\leq 50^{\circ}\text{C}$ rise at rated current.

APPLICATION

TYPICAL APPLICATION CIRCUIT



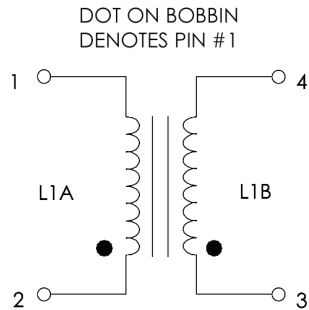
DOT ON BOBBIN
DENOTES PIN #1



EMI/RFI Common Mode Line Filters

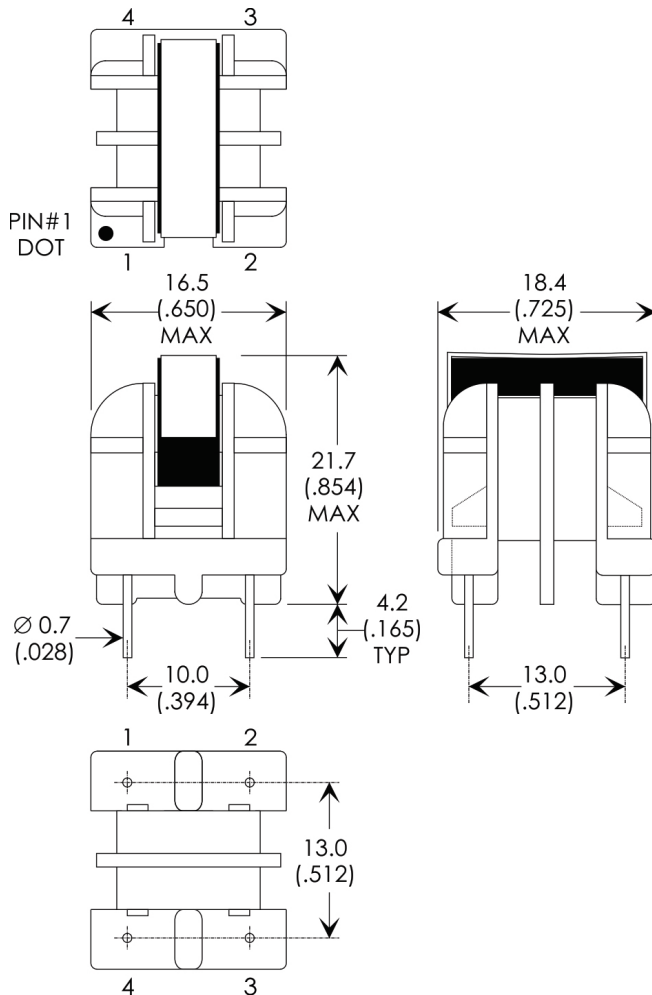
PMCU-0xxx U10.5

SCHEMATIC



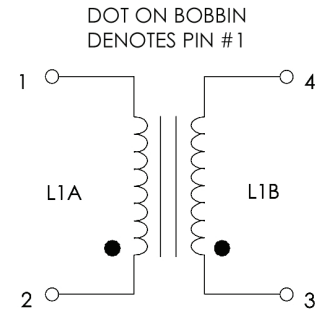
Note: Part is reversible and can be inserted in PCB either way

MECHANICAL DIMENSIONS



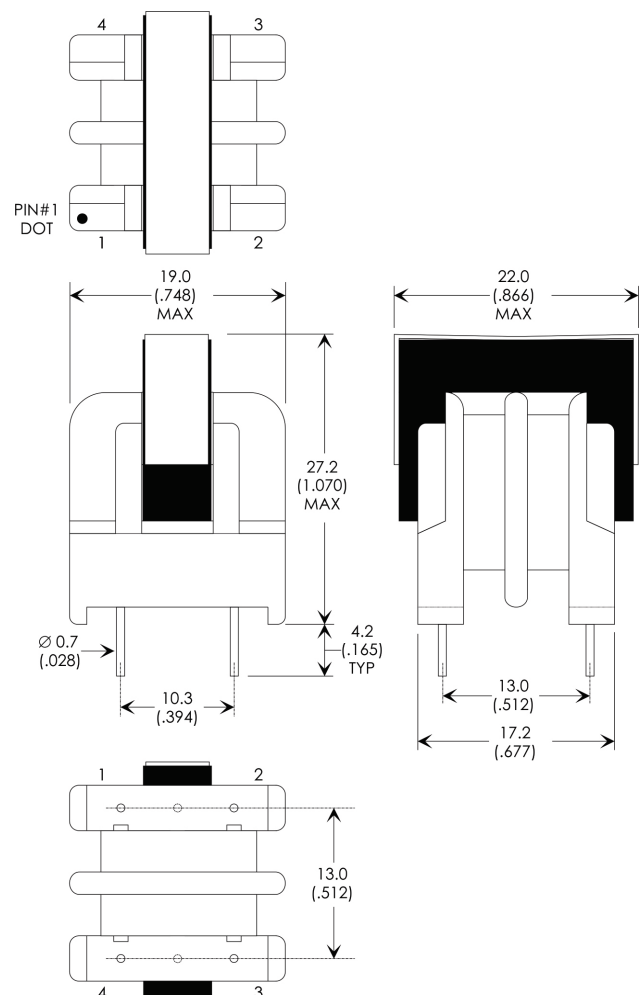
PMCU-2xxx U16

SCHEMATIC



Note: Part is reversible and can be inserted in PCB either way

MECHANICAL DIMENSIONS



EMI/RFI Common Mode Line Filters



— Designed for Medium and High Power AC Input Line Filtering —

- ▶ Rated for Input Voltage up to 250Vac and 45Hz to 450Hz
- ▶ Low Profile Horizontal Construction
- ▶ 3750Vrms Isolation and 1000M Ohm Insulation Resistance @ 500Vdc
- ▶ Temperature Rise $\leq 50^{\circ}\text{C}$ at Rated Current

ELECTRICAL RATINGS AT 25°C

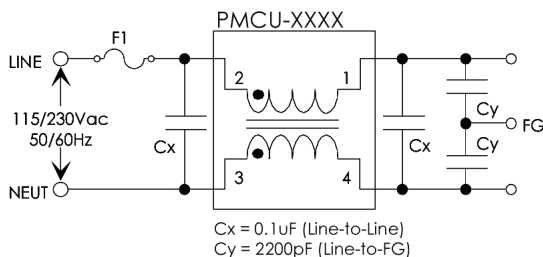
PART NUMBER	RATED RMS Current (Amps rms)	Load VA @ RMS Line		INDUCTANCE @ 1KHz (mH Min.)	DCR EACH WINDING (Ohms Max.)	PACKAGE
		115V	230V			
PMCE-0470	0.75	86.25	172.5	47.0	0.72	E25.4
PMCE-0330	1.0	115.0	230.0	33.0	0.55	E25.4
PMCE-0160	1.5	172.5	345.0	16.0	0.25	E25.4
PMCE-0100	1.75	201.25	402.5	10.0	0.17	E25.4
PMCE-0056	2.25	258.75	517.5	5.6	0.08	E25.4
PMCE-0033	2.75	316.25	632.0	3.3	0.055	E25.4
PMCE-0015	3.5	402.5	805.0	1.5	0.032	E25.4
PMCE-3470	1.75	201.25	402.5	47.0	0.52	E35
PMCE-3330	2.0	230.0	460.0	33.0	0.375	E35
PMCE-3220	2.5	316.25	632.5	22.0	0.25	E35
PMCE-3100	3.5	402.5	805.0	10.0	0.15	E35
PMCE-3056	4.5	517.5	1035.0	5.6	0.09	E35
PMCE-3033	5.5	632.5	1265.0	3.3	0.05	E35
PMCE-3015	7.0	805.0	1610.0	1.5	0.03	E35

Notes:

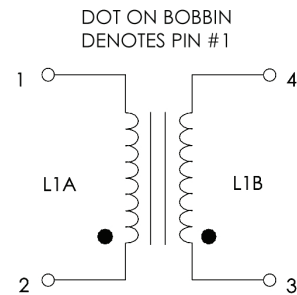
- (1) Temperature Rise is specified at maximum continuous current. Lower currents will result in reduced temperature rise. Design point is $\leq 50^{\circ}\text{C}$ rise at rated current.

APPLICATION

TYPICAL APPLICATION CIRCUIT



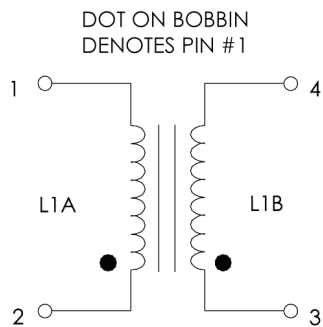
SCHEMATIC



EMI/RFI Common Mode Line Filters

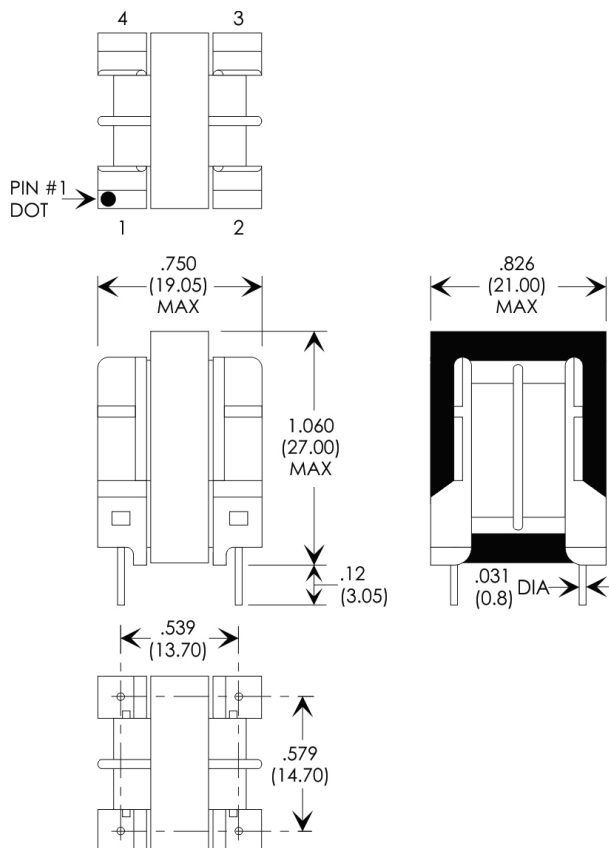
PMCE-0xxx E25.4

SCHEMATIC



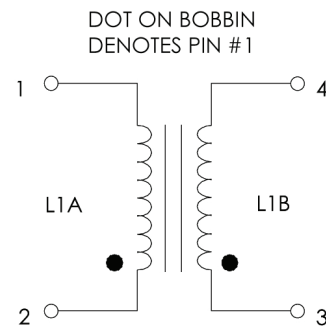
Note: Part is reversible and can be inserted in PCB either way

MECHANICAL DIMENSIONS



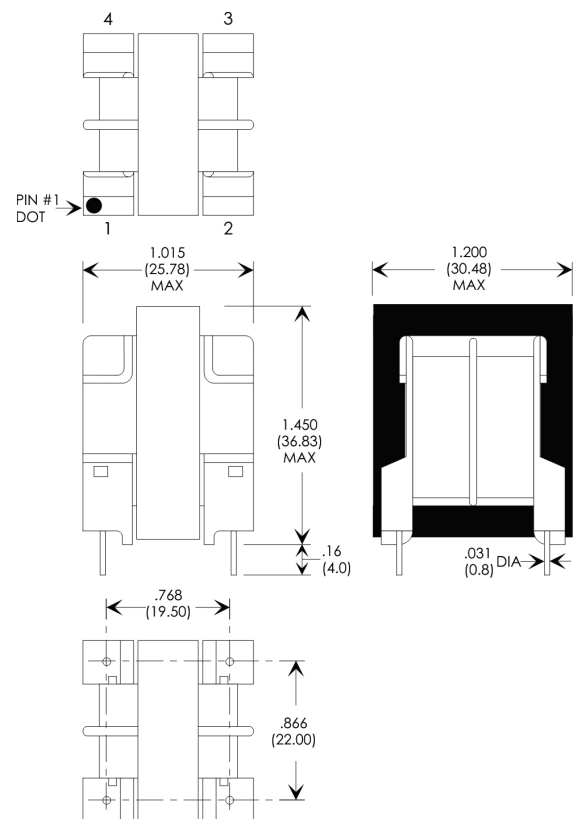
PMCE-3xxx E35

SCHEMATIC



Note: Part is reversible and can be inserted in PCB either way

MECHANICAL DIMENSIONS



Common Mode Power Line Chokes

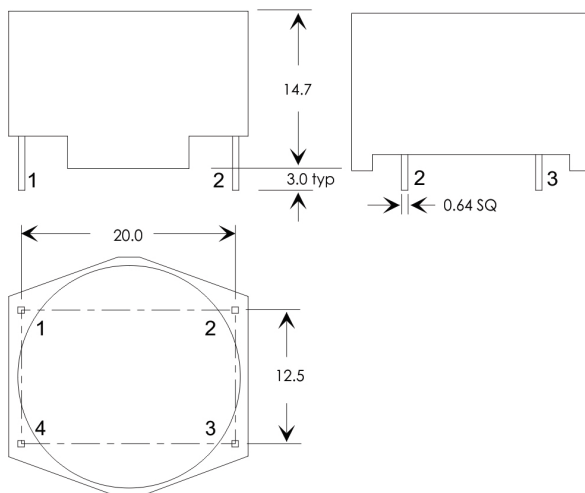
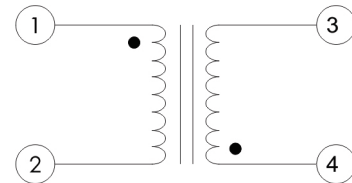
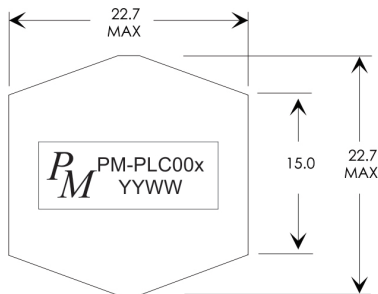


— Designed for High Frequency Power Supply Applications —

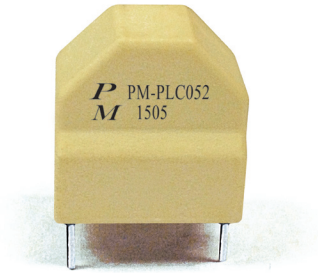
- ▶ High Resonance Frequency
- ▶ Storage Temp -25°C to +125°C

ELECTRICAL RATINGS AT 25°C

PART NUMBER	OCL Each Winding @10KHz(mH ±30%)	I 50Hz & Rated Temp (A)	DCR Each Winding mΩ typ.	Temp (°C)	Isolation WDG to WDG VAC
PM-PLC001	47.0	0.3	2500.0	+60	1500
PM-PLC002	27.0	0.5	1200.0	+60	1500
PM-PLC003	10.0	1.0	480.0	+60	1500
PM-PLC004	6.8	1.3	230.0	+60	1500
PM-PLC005	4.0	1.7	175.0	+60	1500
PM-PLC006	2.2	2.0	130.0	+60	1500
PM-PLC007	1.7	2.5	80.0	+60	1500
PM-PLC008	1.2	3.0	56.0	+60	1500



Common Mode Power Line Chokes

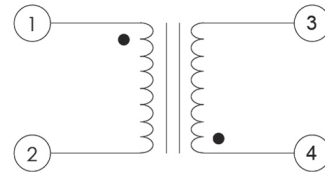
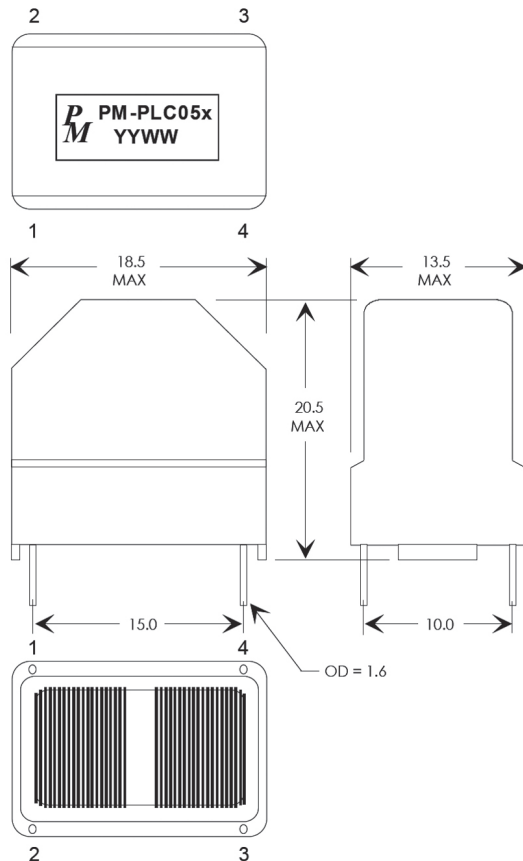


— Designed for High Frequency Power Supply Applications —

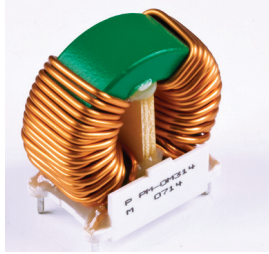
- ▶ High Resonance Frequency
- ▶ Storage Temp -25°C to +125°C

ELECTRICAL RATINGS AT 25°C

PART NUMBER	OCL Each Winding @10KHz(mH ±30%)	I 50Hz & Rated Temp. (A)	DCR Each Winding mΩ typ.	Temp (°C)	Isolation WDG to WDG VAC
PM-PLC051	47.0	0.3	2500.0	+60	1500
PM-PLC052	27.0	0.5	1200.0	+60	1500
PM-PLC053	10.0	1.0	480.0	+60	1500
PM-PLC054	6.8	1.3	230.0	+60	1500
PM-PLC055	4.0	1.7	175.0	+60	1500
PM-PLC056	2.2	2.0	130.0	+60	1500
PM-PLC057	1.7	2.5	80.0	+60	1500
PM-PLC088	1.2	3.0	56.0	+60	1500



Open Common Mode EMI Suppression Inductors



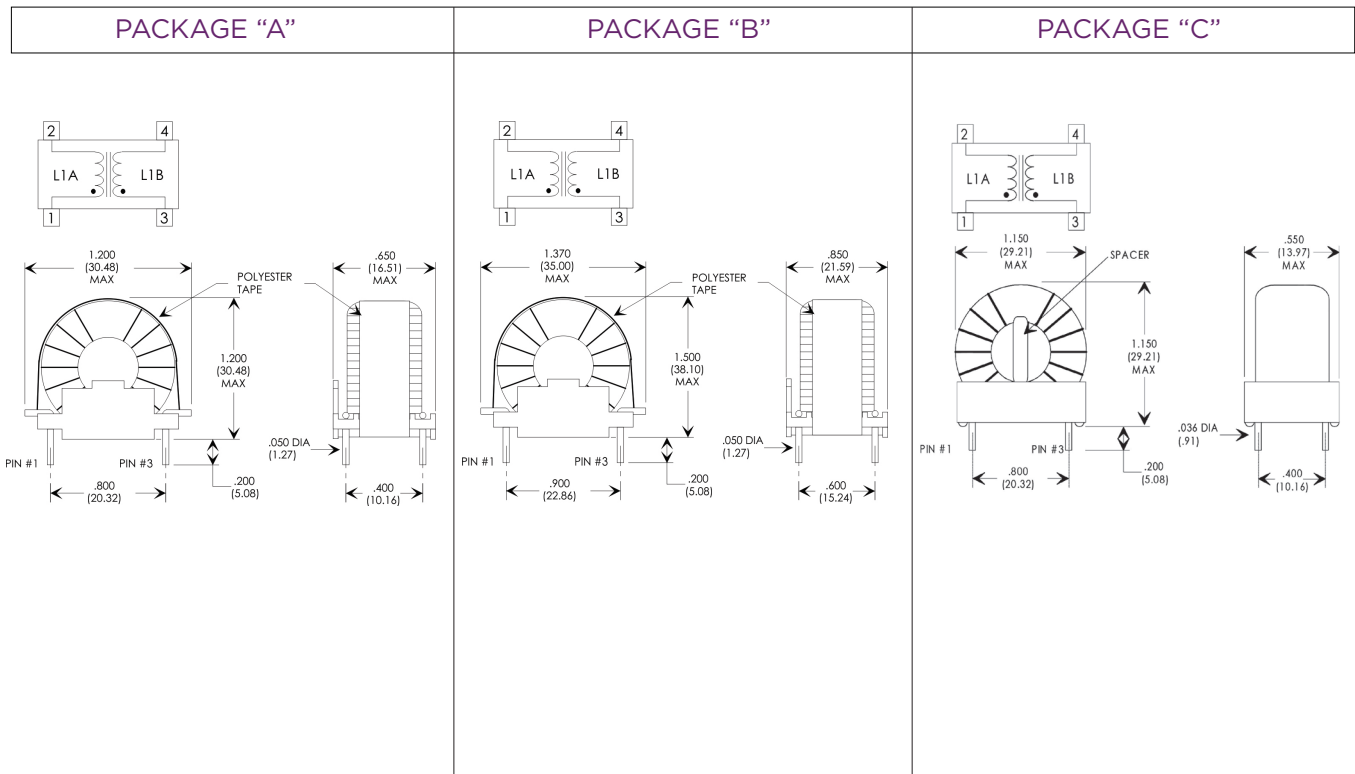
— Designed for High Frequency Power Supply Applications —

- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

ELECTRICAL RATINGS AT 25°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	210.0	420.0	10.0	130.0	0.24	A
PM-OM02	3.5	400.0	800.0	3.0	35.0	0.06	A
PM-OM03	6.0	700.0	1400.0	1.0	12.0	0.02	A
PM-OM04	2.6	300.0	600.0	16.0	180.0	0.32	B
PM-OM05	3.2	375.0	750.0	8.0	90.0	0.12	B
PM-OM06	5.2	600.0	1200.0	4.0	45.0	0.04	B
PM-OM07	7.5	875.0	1750.0	2.0	25.0	0.02	B
PM-OM13	6.0	700.0	1400.0	1.0	12.0	0.02	C

NOTE: MAY USE AT HIGHER VOLTAGE LINE (265V, 300V...) WITH THE SAME OR LESS RATED CURRENT



Open Common Mode EMI Suppression Inductors



— Designed for High Frequency Power Supply Applications —

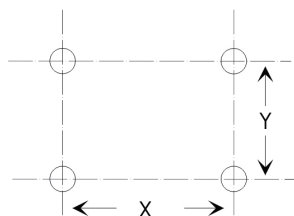
- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

ELECTRICAL RATINGS AT 25°C

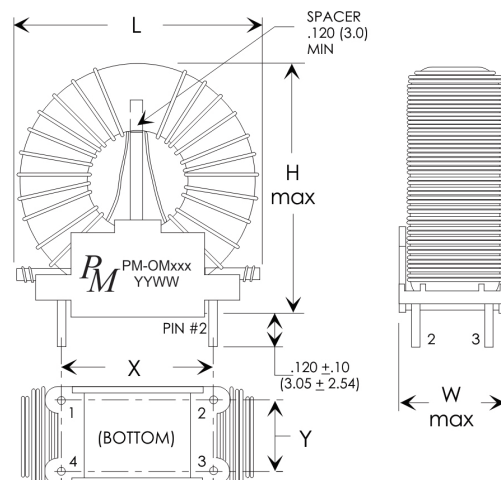
PART NUMBER	IND. (Ls) @15.75 KHz (mH Min)	CURRENT RATING (Arms)	LEAKAGE LL (μH Max.)	DCR Ohms (Max.)	REF. DIMENSIONS IN INCHES					
					H (Max)	L (Max)	W (Max)	X (± 0.01)	Y (± 0.01)	Lead Dia.
PM-OM101	5.0	1.0	80.0	0.207	1.100	1.210	0.625	0.80	0.40	0.050
PM-OM102	8.0	1.0	125.0	0.270	1.100	1.210	0.625	0.80	0.40	0.050
PM-OM103	15.0	1.0	233.0	0.430	1.155	1.300	0.625	0.80	0.40	0.050
PM-OM104	2.5	2.0	42.0	0.090	1.100	1.210	0.625	0.80	0.40	0.050
PM-OM105	4.0	2.0	70.0	0.095	1.050	1.210	0.625	0.80	0.40	0.050
PM-OM106	7.5	2.0	74.0	0.108	1.155	1.300	0.625	0.80	0.40	0.050
PM-OM107	1.3	4.0	20.0	0.029	1.100	1.210	0.625	0.80	0.40	0.032
PM-OM108	2.1	4.0	36.0	0.040	1.100	1.210	0.625	0.80	0.40	0.032
PM-OM109	3.7	4.0	40.0	0.036	1.125	1.300	0.625	0.80	0.40	0.032
PM-OM110	1.0	6.0	19.0	0.022	1.100	1.210	0.625	0.80	0.40	0.040
PM-OM111	1.7	6.0	34.0	0.032	1.155	1.300	0.625	0.80	0.40	0.040
PM-OM112	3.0	6.0	35.0	0.027	1.200	1.210	0.625	0.80	0.40	0.040
PM-OM113	0.6	9.0	11.0	0.012	1.200	1.210	0.625	0.80	0.40	0.045
PM-OM114	1.1	9.0	12.0	0.013	1.300	1.210	0.625	0.80	0.40	0.045
PM-OM115	1.9	9.0	20.0	0.017	1.300	1.400	0.625	0.80	0.40	0.045
PM-OM116	0.5	12.0	9.0	0.008	1.200	1.210	0.625	0.80	0.40	0.051
PM-OM117	0.8	12.0	9.0	0.008	1.200	1.210	0.625	0.80	0.40	0.051
PM-OM118	1.4	12.0	16.0	0.011	1.300	1.210	0.625	0.80	0.40	0.051
PM-OM119	0.3	15.0	6.0	0.005	1.300	1.210	0.625	0.80	0.40	0.057
PM-OM120	0.6	15.0	6.5	0.006	1.250	1.210	0.625	0.80	0.40	0.057
PM-OM121	1.1	15.0	13.7	0.008	1.250	1.210	0.700	0.80	0.40	0.057

NOTE: MAY USE AT HIGHER VOLTAGE LINE (265V, 300V...) WITH THE SAME OR LESS RATED CURRENT

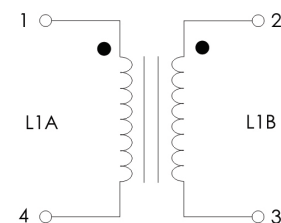
MECHANICAL



RECOMMENDED P.C.B. LAYOUT
Dimensions in inches



SCHEMATIC



Open Common Mode EMI Suppression Inductors



— Designed for High Frequency Power Supply Applications —

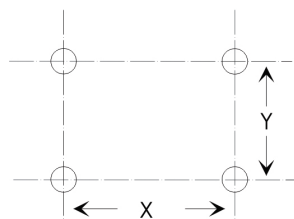
- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

ELECTRICAL RATINGS AT 25°C

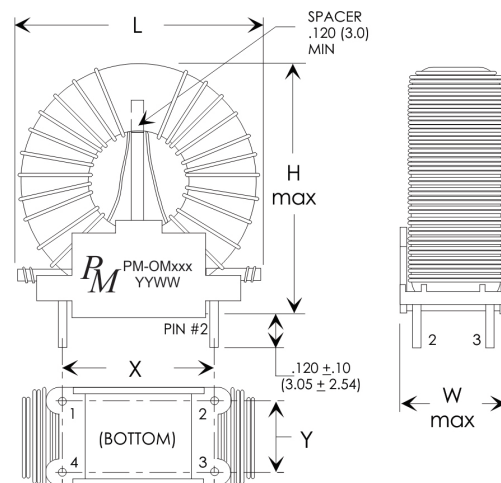
PART NUMBER	IND. (Ls) @15.75 KHz (mH Min)	CURRENT RATING (Arms)	LEAKAGE LL (μH Max.)	DCR Ohms (Max.)	REF. DIMENSIONS IN INCHES					
					H (Max)	L (Max)	W (Max)	X (± 0.01)	Y (± 0.01)	Lead Dia.
PM-OM201	7.5	1.0	90.0	0.270	1.100	1.310	0.825	0.90	0.60	0.054
PM-OM202	13.0	1.0	190.0	0.415	1.300	1.310	0.825	0.90	0.60	0.054
PM-OM203	3.8	2.0	48.0	0.106	1.100	1.310	0.825	0.90	0.60	0.054
PM-OM204	6.5	2.0	98.0	0.145	1.300	1.310	0.825	0.90	0.60	0.054
PM-OM205	1.9	4.0	26.0	0.038	1.100	1.310	0.825	0.90	0.60	0.054
PM-OM206	3.3	4.0	45.0	0.055	1.300	1.300	0.825	0.90	0.60	0.054
PM-OM207	1.5	6.0	21.0	0.029	1.100	1.310	0.825	0.90	0.60	0.054
PM-OM208	2.6	6.0	41.0	0.040	1.400	1.400	0.900	0.90	0.60	0.054
PM-OM209	0.9	9.0	17.0	0.014	1.200	1.310	0.825	0.90	0.60	0.042
PM-OM210	1.5	9.0	15.0	0.013	1.250	1.250	0.825	0.90	0.60	0.042
PM-OM211	0.7	12.0	14.0	0.011	1.200	1.250	0.825	0.90	0.60	0.048
PM-OM212	1.2	12.0	14.0	0.011	1.200	1.250	0.825	0.90	0.60	0.048
PM-OM213	0.5	15.0	8.7	0.007	1.300	1.300	0.825	0.90	0.60	0.054
PM-OM214	0.8	15.0	10.0	0.007	1.200	1.250	0.825	0.90	0.60	0.054

NOTE: MAY USE AT HIGHER VOLTAGE LINE (265V, 300V...) WITH THE SAME OR LESS RATED CURRENT

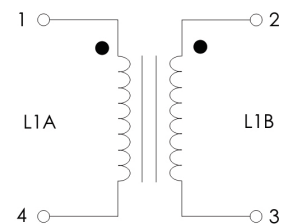
MECHANICAL



RECOMMENDED P.C.B. LAYOUT
Dimensions in inches



SCHEMATIC



Open Common Mode EMI Suppression Inductors



— Designed for High Frequency Power Supply Applications —

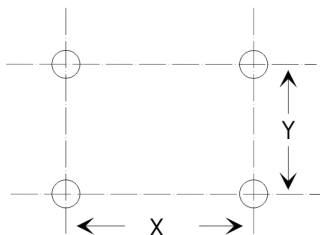
- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

ELECTRICAL RATINGS AT 25°C

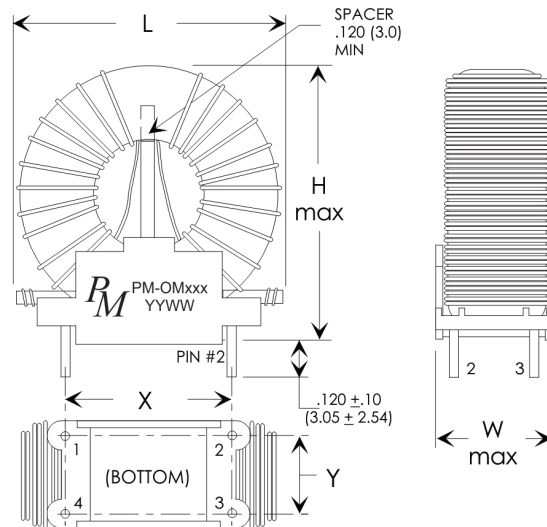
PART NUMBER	IND. (Ls) @15.75 KHz (mH Min)	CURRENT RATING (Arms)	LEAKAGE LL (μH Max.)	DCR Ohms (Max.)	REF. DIMENSIONS IN INCHES					
					H (Max)	L (Max)	W (Max)	X (± 0.01)	Y (± 0.01)	Lead Dia.
PM-OM301	32.5	1.0	485.0	0.650	1.400	1.650	0.925	1.20	0.70	0.054
PM-OM302	56.0	1.0	780.0	0.900	1.650	1.650	0.925	1.20	0.70	0.054
PM-OM303	16.0	2.0	210.0	0.240	1.400	1.650	0.925	1.20	0.70	0.054
PM-OM304	28.0	2.0	410.0	0.330	1.650	1.650	0.925	1.20	0.70	0.054
PM-OM305	8.0	4.0	57.5	0.061	1.350	1.650	0.925	1.20	0.70	0.054
PM-OM306	14.0	4.0	180.0	0.120	1.700	1.650	0.950	1.20	0.70	0.054
PM-OM307	6.6	6.0	49.0	0.048	1.400	1.600	0.925	1.20	0.70	0.054
PM-OM308	11.5	6.0	140.0	0.088	1.700	1.650	0.925	1.20	0.70	0.054
PM-OM309	4.0	9.0	37.0	0.026	1.400	1.450	0.925	1.20	0.70	0.042
PM-OM310	7.0	9.0	104.0	0.045	1.760	1.760	0.975	1.20	0.70	0.042
PM-OM311	3.0	12.0	40.0	0.022	1.700	1.700	0.950	1.20	0.70	0.048
PM-OM312	5.2	12.0	47.0	0.025	1.700	1.700	1.000	1.20	0.70	0.048
PM-OM313	2.5	15.0	42.0	0.019	1.750	1.750	1.000	1.20	0.70	0.054
PM-OM314	4.4	15.0	48.0	0.017	1.700	1.700	1.000	1.20	0.70	0.054
PM-OM315	1.0	20.0	14.0	0.007	1.700	1.700	0.925	1.20	0.70	0.064

NOTE: MAY USE AT HIGHER VOLTAGE LINE (265V, 300V...) WITH THE SAME OR LESS RATED CURRENT

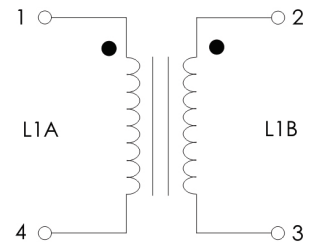
MECHANICAL



RECOMMENDED P.C.B. LAYOUT
Dimensions in inches



SCHEMATIC



Open Common Mode EMI Suppression Inductors



— Designed for High Frequency Power Supply Applications —

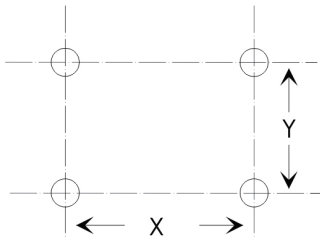
- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

ELECTRICAL RATINGS AT 25°C

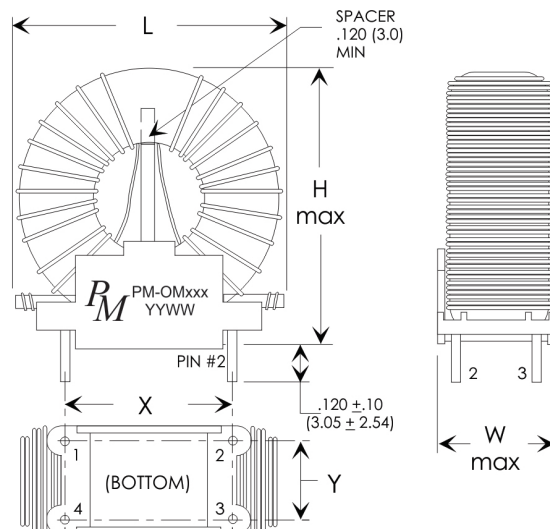
PART NUMBER	IND. (Ls) @15.75 KHz (mH Min)	CURRENT RATING (Arms)	LEAKAGE LL (μH Max.)	DCR Ohms (Max.)	REF. DIMENSIONS IN INCHES					
					H (Max)	L (Max)	W (Max)	X (± 0.01)	Y (± 0.01)	Lead Dia.
PM-OM401	72.0	1.0	1400.0	1.150	2.100	2.100	1.130	1.50	0.90	0.054
PM-OM402	125.0	1.0	1400.0	1.150	2.200	2.150	1.130	1.50	0.90	0.054
PM-OM403	36.0	2.0	680.0	0.415	2.150	2.150	1.130	1.50	0.90	0.054
PM-OM404	62.0	2.0	750.0	0.415	2.200	2.150	1.130	1.50	0.90	0.054
PM-OM405	19.0	4.0	350.0	0.150	2.200	2.180	1.130	1.50	0.90	0.054
PM-OM406	32.0	4.0	370.0	0.158	2.200	2.180	1.130	1.50	0.90	0.054
PM-OM407	15.0	6.0	275.0	0.114	2.200	2.180	1.130	1.50	0.90	0.054
PM-OM408	26.0	6.0	320.0	0.115	2.225	2.180	1.130	1.50	0.90	0.054
PM-OM409	10.0	9.0	190.0	0.057	2.200	2.180	1.130	1.50	0.90	0.042
PM-OM410	17.0	9.0	220.0	0.062	2.280	2.250	1.150	1.50	0.90	0.042
PM-OM411	7.5	12.0	140.0	0.042	2.200	2.250	1.130	1.50	0.90	0.048
PM-OM412	13.0	12.0	155.0	0.043	2.500	2.300	1.130	1.50	0.90	0.048
PM-OM413	6.0	15.0	111.0	0.030	2.200	2.250	1.150	1.50	0.90	0.057
PM-OM414	10.0	15.0	122.0	0.029	2.280	2.300	1.130	1.50	0.90	0.057

NOTE: MAY USE AT HIGHER VOLTAGE LINE (265V, 300V...) WITH THE SAME OR LESS RATED CURRENT

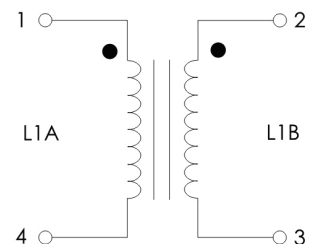
MECHANICAL



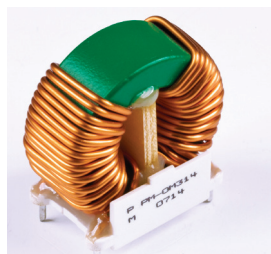
RECOMMENDED P.C.B. LAYOUT
Dimensions in inches



SCHEMATIC



Open Common Mode EMI Suppression Inductors



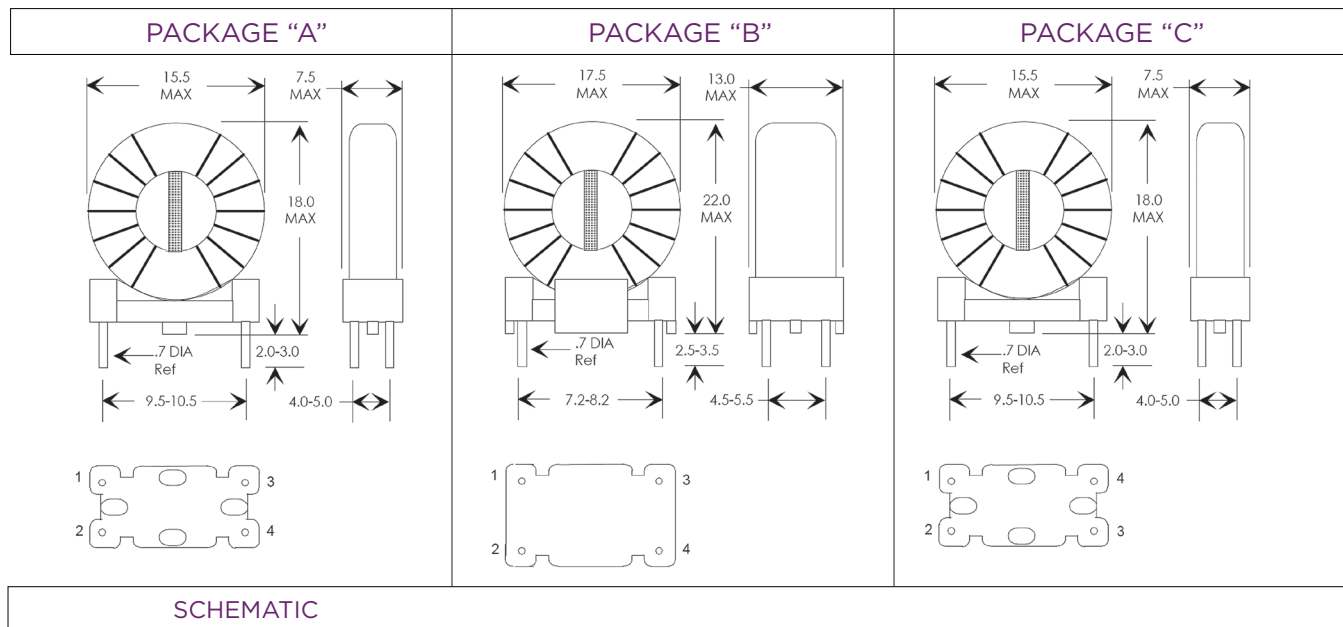
— Designed for High Frequency Power Supply Applications —

- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

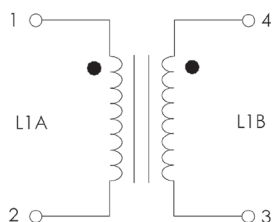
ELECTRICAL RATINGS AT 25°C

PART NUMBER	RATED RMS Current Amps	INDUCTANCE @ 1KHz EACH WINDING (mH $\pm$ 30%)	DCR EACH WINDING (Ohms Max.)	PACKAGE
PM-OM501*	0.5	20.0	1.0	A
PM-OM502	3.0	1.0	0.035	B
PM-OM503	0.3	1.0	2.0	A
PM-OM504	1.5	0.10	0.08	C

Width = 9mm



SCHEMATIC



Open Common Mode EMI Suppression Inductors



— Designed for High Frequency Power Supply Applications —

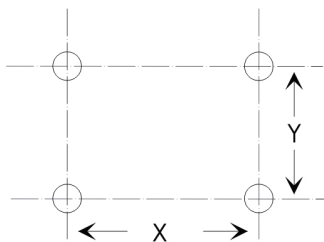
- ▶ Industry Standard Vertical Mount Construction
- ▶ Balanced Windings with 1250Vrms Minimum Isolation
- ▶ Custom Values Available

ELECTRICAL RATINGS AT 25°C

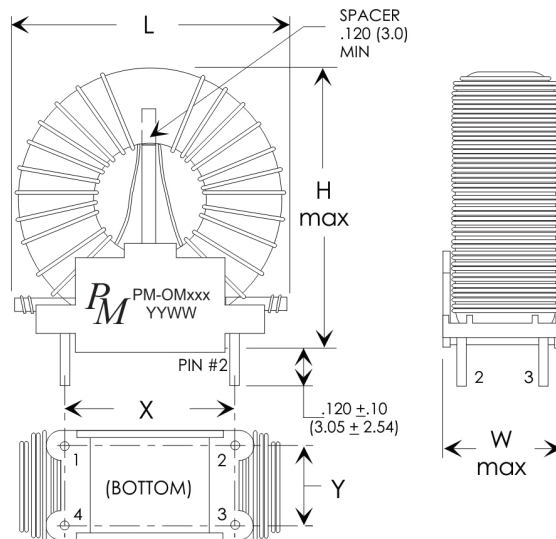
PART NUMBER	IND. (Ls) @15.75 KHz (mH Min)	CURRENT RATING (Arms)	LEAKAGE LL (μH Max.)	DCR Ohms (Max.)	REF. DIMENSIONS IN INCHES					
					H (Max)	L (Max)	W (Max)	X (± 0.01)	Y (± 0.01)	Lead Dia.
PM-OM601	30.0	2.3	350.0	0.33	1.45	1.35	0.825	0.90	0.60	0.054

NOTE: MAY USE AT HIGHER VOLTAGE LINE (265V, 300V...) WITH THE SAME OR LESS RATED CURRENT

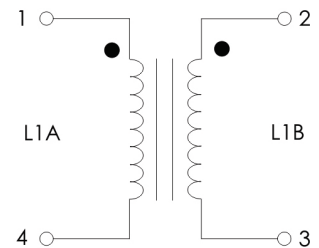
MECHANICAL



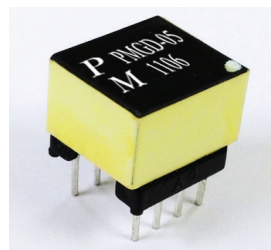
RECOMMENDED P.C.B. LAYOUT
Dimensions in inches



SCHEMATIC



Gate Drive and Base Drive Transformers



— Designed for Single and Double Ended Controllers —

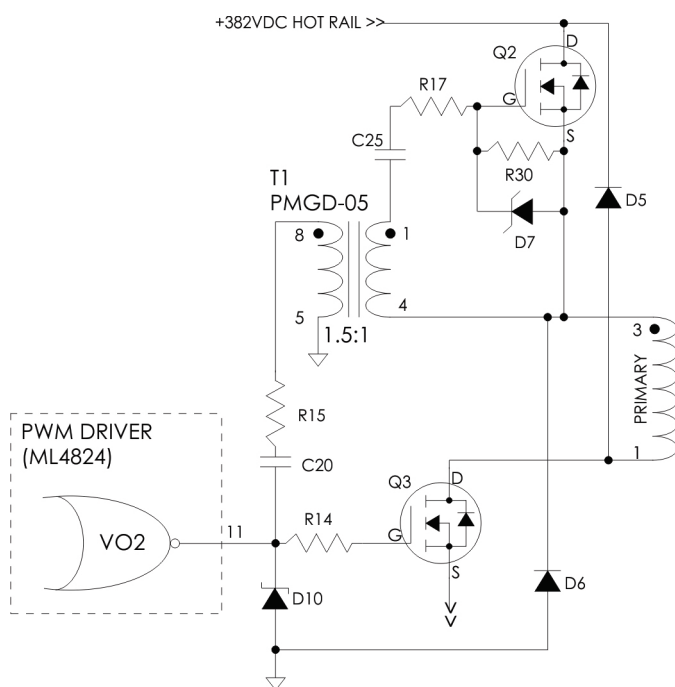
- ▶ Designs from 20kHz to >300kHz
- ▶ High Isolation Voltage and Low Leakage Inductance
- ▶ Industry Standard Packages and Custom Values Available

ELECTRICAL RATINGS AT 25°C

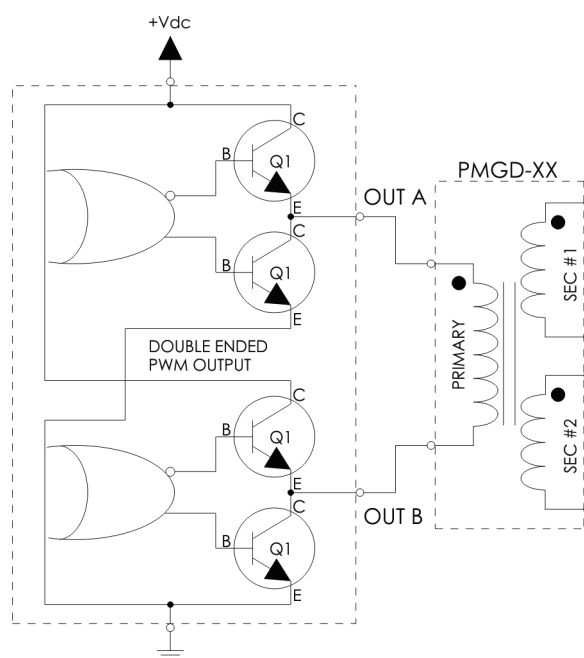
PART NUMBER	URNS RATIO (Pri:Sec ± 5%)	PRIMARY OCL (μH Typ.)	LEAKAGE IND (μH Max.)	PRI/SEC HI-POT V	PACKAGE	TYPICAL APPLICATION NOTE
PMGD-02	1 : 1 : 1	530.0	1.5	1500dc	EP13	150KHz Double Ended Drive
PMGD-03	1 : 1	800.0	2.0	1500dc	EP7	100KHz Single Ended Drive
PMGD-04	1 : 1 : 1	24500.0	20.0	1000dc	EP10	20KHz Double Ended Drive
PMGD-05	1 : 0.67	6200.0	15.0	1000dc	EP10	25KHz Single Ended Drive
PMGD-06	1 : 1	6200.0	15.0	2000ac	EP10	100KHz Double Ended Drive
PMGD-07	1 : 2 : 2	2350.0	2.0	1500ac	EP13	40KHz Dual Single Ended Drive
PMGD-08	1 : 1.25 : 1.25	575.0	1.0	3000ac	EP13	180KHz Dual Single Ended Drive
PMGD-09	1 : 2 : 2	2350.0	2.0	3000ac	EP13	40KHz Dual Single Ended Drive
PMGD-10	1 : 2 : 2	8350.0	25.0	2500ac	EP13	20KHz Dual Single Ended Drive

APPLICATIONS

Typical Single Ended Application



Typical Double Ended Application



Gate Drive and Base Drive Transformers



— Designs for Gate/Base/Flyback/Push-Pull Topologies —

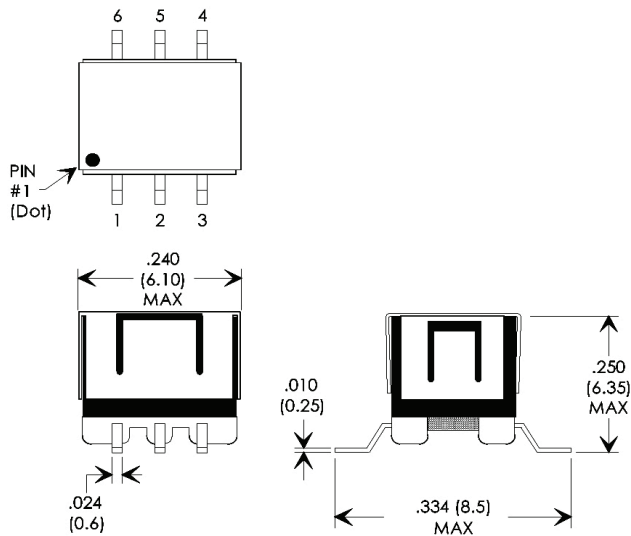
- ▶ Operating Frequency from 50kHz and Higher
- ▶ High Isolation Voltage
- ▶ SMD Industry Standard Packages

ELECTRICAL RATINGS AT 25°C

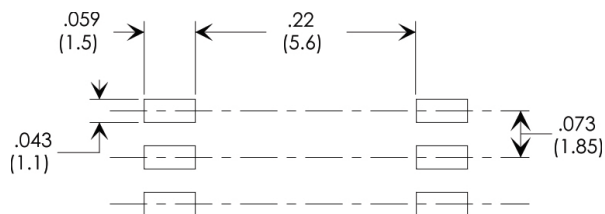
PART NUMBER	URNS RATIO (Pri:Sec ± 5%)	PRIMARY OCL (μH)	LEAKAGE IND (μH tpy.)	PRI DCR (Ω MAX.)	SEC DCR (Ω MAX.)	PRI/SEC HI-POT VDC	PACKAGE/ SCHEMATIC
PMGD-02	1 : 1 : 1	530.0	1.5	-	-	1500	EP13/9
PMGD-03	1 : 1	800.0	2.0	-	-	1500	EP7/3
PMGD-04	1 : 1 : 1	24500.0	20.0	-	-	1000	EP10/10
PMGD-05	1 : 0.67	6200.0	15.0	-	-	1000	EP10/11
PMGD-06	1 : 1	6200.0	15.0	-	-	2800	EP10/11
PMGD-07	1 : 2 : 2	2350.0	2.0	-	-	2100	EP13/12
PMGD-08	1 : 1.25 : 1.25	575.0	1.0	-	-	4200	EP13/13
PMGD-09	1 : 2 : 2	2350.0	2.0	-	-	4200	EP13/13
PMGD-10	1 : 2 : 2	8350.0	25.0	-	-	3500	EP13/13
PMGD-50	1CT : 1CT	800 MIN	3.0	3.5	3.5	1250	EP5G/1
PMGD-51	1CT : 2CT	390 MIN	1.5	2.25	4.5	1250	EP5G/1
PMGD-52	1CT : 2.5CT	390 MIN	1.5	2.25	6.0	1250	EP5G/1
PMGD-53	1CT : 3CT	2000 MIN	1.2	3.0	25.0	1250	EP5G/1
PMGD-54	1 : 1CT	2000 MIN	1.2	2.75	2.75	1250	EP5G/2
PMGD-55	1 : 2CT	17.2 ± 20%	1.0	1.25	3.0	1250	EP5G/2
PMGD-56	1 : 12.04	3.7 ± 20%	0.275	0.9	12.25	550	EP5G/3
PMGD-57	1 : 3	9.88 ± 20%	0.5	1.0	3.25	1250	EP5G/4
PMGD-58	1 : 1 : 1	330 MIN	0.5	2.0	2.0	1500	EP5G/7
PMGD-59	1 : 1	330 MIN	1.0	1.0	1.0	1500	EP5G/8
PMGD-60	1CT : 5CT	160 MIN N/A	1.1	9.6	-	1800	A/5
PMGD-61	1CT : 3CT	180 MIN N/A	1.1	8.0	-	1800	A/5
PMGD-62	1 : 5	180 MIN N/A	1.1	8.3	-	1800	A/6
PMGD-63	1 : 1	700 ± 20%	3.0	2.0	2.0	1250	EP5G/3
PMGD-64	1 : 1	785 MIN	0.5	1.0	0.6	0.6	EP5G/4

Gate Drive and Base Drive Transformers

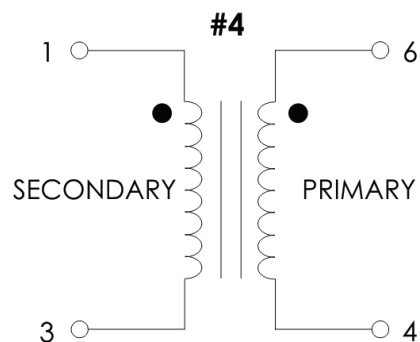
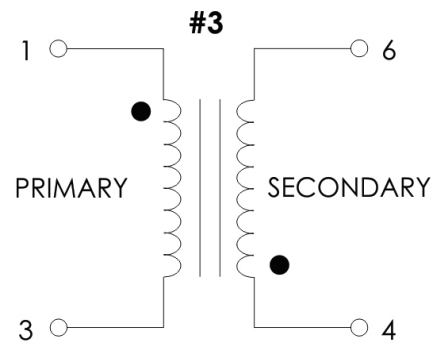
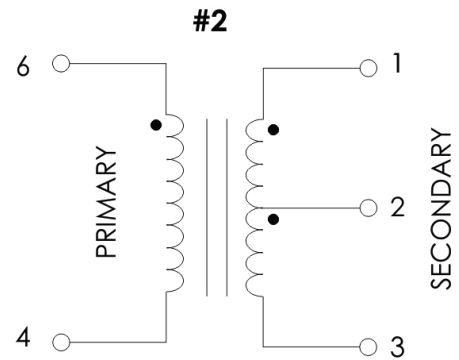
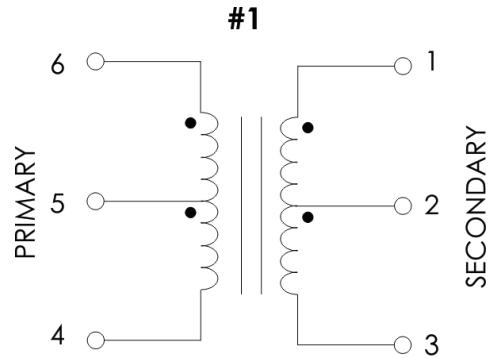
EP5G MECHANICAL DIMENSIONS



EP5G FOOTPRINT

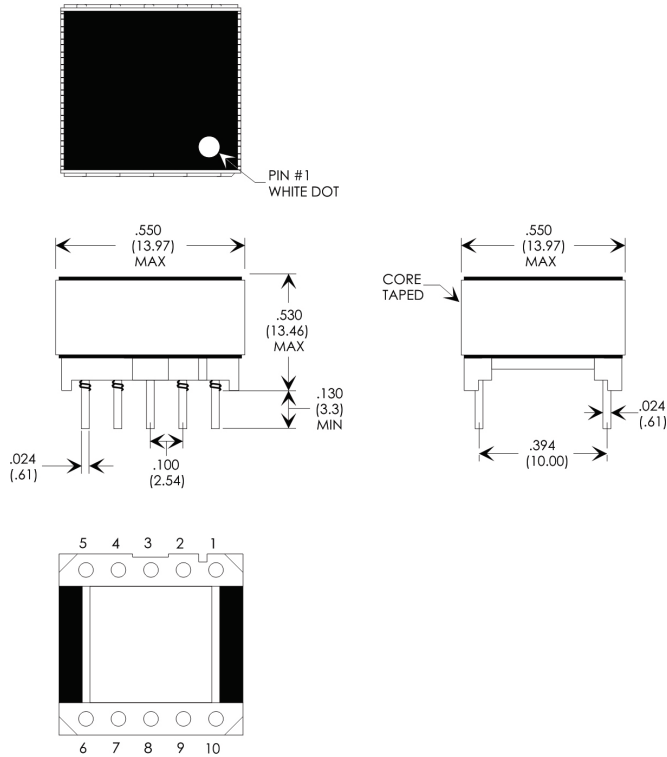


EP5G SCHEMATICS

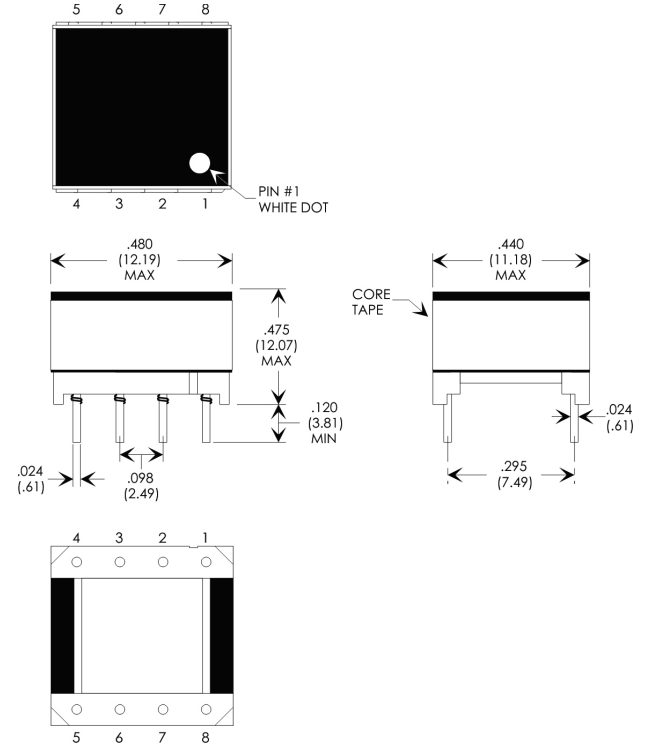


Gate Drive and Base Drive Transformers

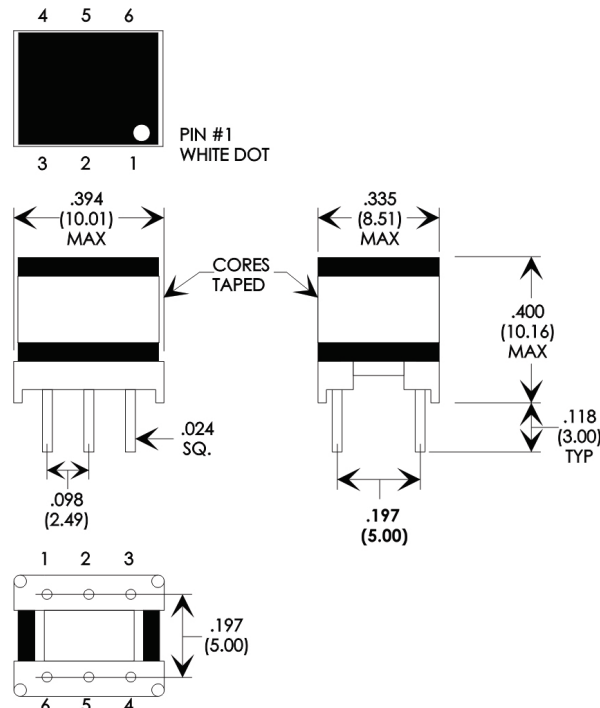
EP13 MECHANICAL DIMENSIONS



EP10 MECHANICAL DIMENSIONS



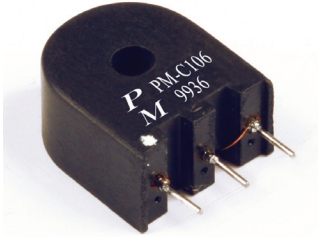
EP7 MECHANICAL DIMENSIONS



Current Sense Inductors with Center Hole

— Designed for Switch Mode Power Supply Applications —

- ▶ Frequency Range from 10kHz to 200kHz
- ▶ Minimum 2500Vrms Isolation
- ▶ Fully Encapsulated Construction with Center Hole for Primary Lead



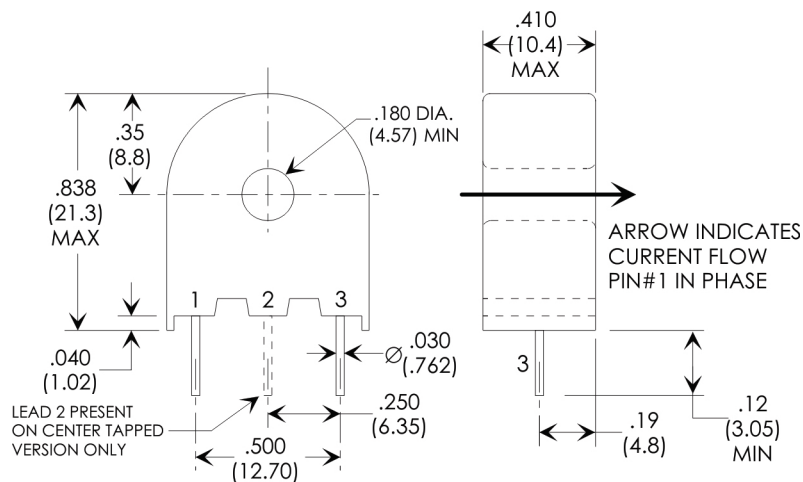
ELECTRICAL RATINGS AT 25°C

CONTROL VALUES				REFERENCE VALUES				CALC. VALUES		SCHEMATIC
PART NUMBER	TURNS $N_s \pm 1\%$	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	0.7	35.0	15.0	0.3	2.4	273.97×10^3	3.31×10^{-9}	A
PM-CI02*	100	20.0	1.4	50.0	50.0	0.5	2.0	68.49×10^3	3.33×10^{-9}	A
PM-CI03	200	80.0	4.5	50.0	200.0	1.0	2.0	17.12×10^3	3.35×10^{-9}	A
PM-CI04	300	180.0	9.0	75.0	300.0	1.0	1.4	7.61×10^3	3.37×10^{-9}	A
PM-CI05	50ct	5.0	0.7	35.0	15.0	0.3	2.4	273.97×10^3	3.31×10^{-9}	B
PM-CI06	100ct	20.0	1.4	50.0	50.0	0.5	2.0	68.49×10^3	3.33×10^{-9}	B
PM-CI07	200ct	80.0	4.5	50.0	200.0	1.0	2.0	17.12×10^3	3.35×10^{-9}	B
PM-CI08	300ct	180.0	9.0	75.0	300.0	1.0	1.4	7.61×10^3	3.37×10^{-9}	B

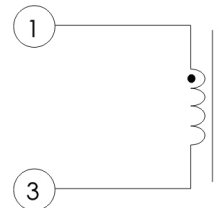
NOTE: * PM-CI02* TRIM THE PIN LENGTH = 0.12" - 0.15" PER CUSTOMER PO ONLY.

- 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.
- 3) THE MAXIMUM RECOMMENDED OPERATING FLUX DENSITY (B_{op}) AT 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.

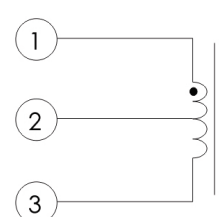
MECHANICAL DIMENSIONS



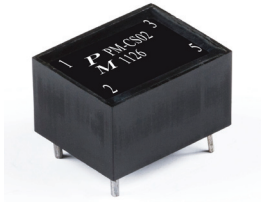
SCHEMATIC "A"



SCHEMATIC "B"



Current Sense Inductors



— Designed for Switch Mode Power Supply Applications —

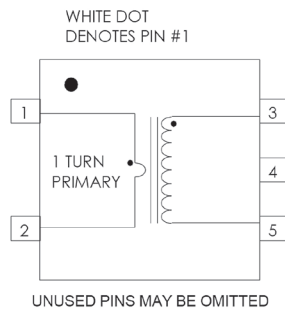
- Frequency Range from 10kHz to 200kHz
- Fully Encapsulated Construction
- 2500Vrms Minimum Isolation Voltage

ELECTRICAL RATINGS AT 25°C

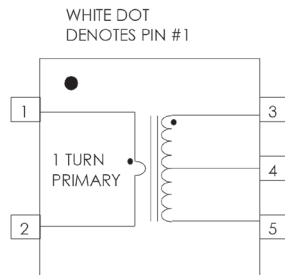
CONTROL VALUES				REFERENCE VALUES				CALC. VALUES		SCHEMATIC
PART NUMBER	TURNS $N_s \pm 1\%$	INDUCT L_s (mH Min.)	DCR R_s (Ohms Max.)	I_{PK} (Amps)	R_T (Ohms)	K_V (Volt/Amp)	DROOP (%)	FLUX FACTOR K_B	LOSS FACTOR K_L	
PM-CS01	50	5.0	0.7	35.0	15.0	0.3	2.4	273.97×10^3	3.31×10^{-9}	A
PM-CS02	100	20.0	1.4	50.0	50.0	0.5	2.0	68.49×10^3	3.33×10^{-9}	A
PM-CS03	200	80.0	4.5	50.0	200.0	1.0	2.0	17.12×10^3	3.35×10^{-9}	A
PM-CS04	300	180.0	11.0	75.0	300.0	1.0	1.4	7.61×10^3	3.37×10^{-9}	A
PM-CS05	50ct	5.0	0.5	35.0	15.0	0.3	2.4	273.97×10^3	3.31×10^{-9}	B
PM-CS06	100ct	20.0	1.0	50.0	50.0	0.5	2.0	68.49×10^3	3.33×10^{-9}	B
PM-CS07	200ct	80.0	2.0	50.0	200.0	1.0	2.0	17.12×10^3	3.35×10^{-9}	B
PM-CS08	300ct	180.0	11.0	75.0	300.0	1.0	1.4	7.61×10^3	3.37×10^{-9}	B

- 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.
- 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.

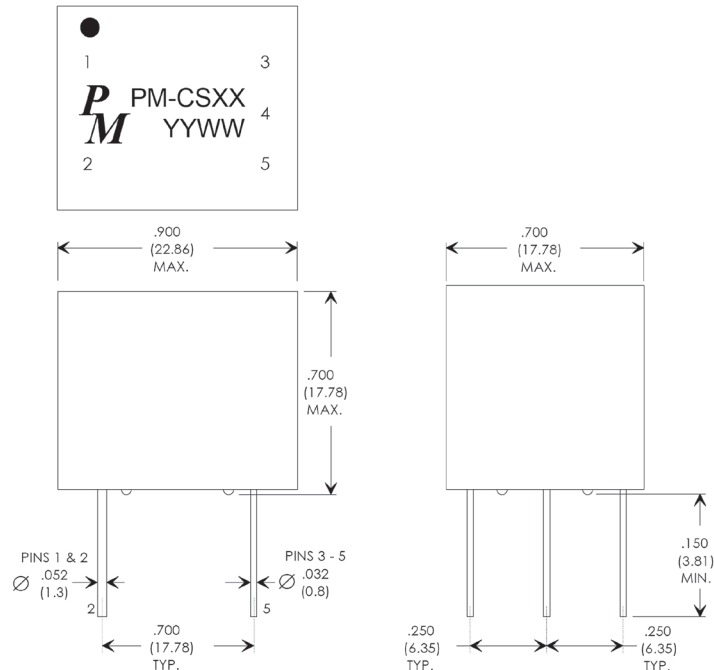
SCHEMATIC "A"



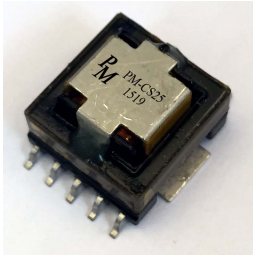
SCHEMATIC "B"



PHYSICAL DIMENSIONS in inches (mm)



Current Sense Inductors



— Designed for Automatic Pick-and-Place Applications —

- ▶ High Current - Primary Rated for 35 Amps RMS
- ▶ Frequency Range from 50kHz to 500kHz
- ▶ Maximum height = 10mm

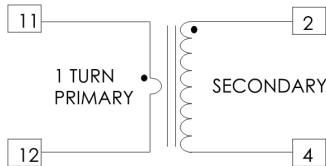
ELECTRICAL RATINGS AT 25°C

PART NUMBER	TURNS $N_s \pm 1\%$	SEC INDUCTANCE (mH Min.)	SEC DCR (Ohms Max.)	PRI CURRENT (Amps)	HIPOT (Vrms)
PM-CS21	1 : 30	0.5	0.34	35.0	500
PM-CS22	1 : 50	1.4	0.57	35.0	500
PM-CS23	1 : 70	2.7	0.8	35.0	500
PM-CS24	1 : 100	5.6	1.5	35.0	500
PM-CS25	1 : 200	22.0	5.0	35.0	500
PM-CS26	1 : 300	50.0	12.0	35.0	500

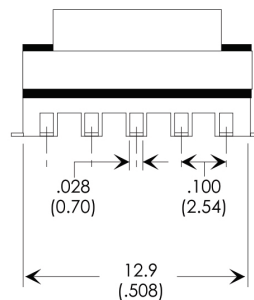
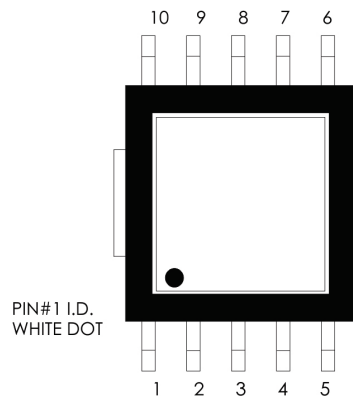
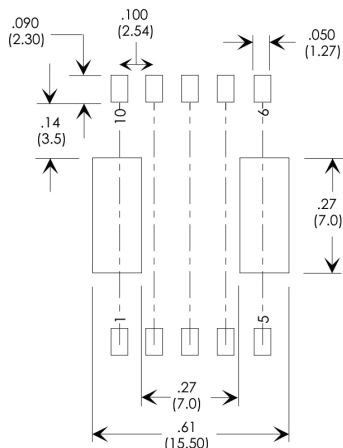
SCHEMATIC

MECHANICAL

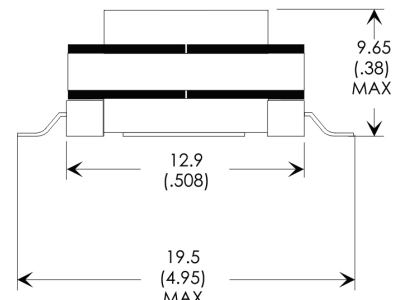
PHYSICAL Dimensions in inches (mm)



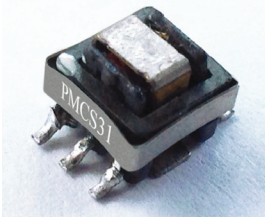
RECOMMEND LAYOUT



PM PM-CSXX
YYWW



Current Sense Inductors



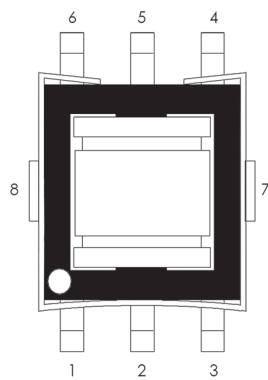
— Designed for Automatic Pick-and-Place Applications —

- ▶ High Current - Primary Rated
- ▶ Operating Frequency Range up to 1MHz
- ▶ Withstands Solder Reflow

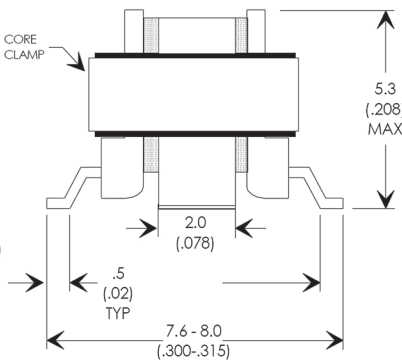
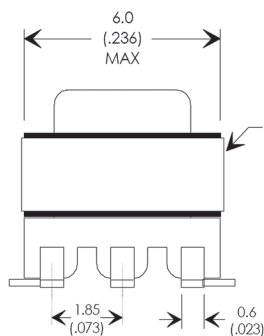
ELECTRICAL RATINGS AT 25°C

PART NUMBER	TURNS $N_s \pm 1\%$	SEC INDUCTANCE (mH Min.)	SEC DCR (Ohms Max.)	PRI CURRENT (Amps)	HIPOT (Vrms)
PM-CS31	1 : 70	980.0	4.75	6.0	500
PM-CS32	1 : 40	320.0	1.14	6.0	500
PM-CS33	1 : 30	180.0	0.87	6.0	500
PM-CS34	1 : 20	80.0	0.55	6.0	500
PM-CS35	1 : 50	500.0	1.5	6.0	500
PM-CS36	1 : 60	720.0	1.75	6.0	500
PM-CS37	1 : 100	2000.0	5.5	6.0	500
PM-CS38	1 : 125	3000.0	6.5	6.0	500
PM-CS39	1 : 200	6700.0	35.0	10.0	500

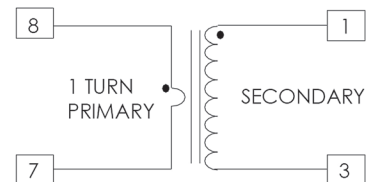
MECHANICAL



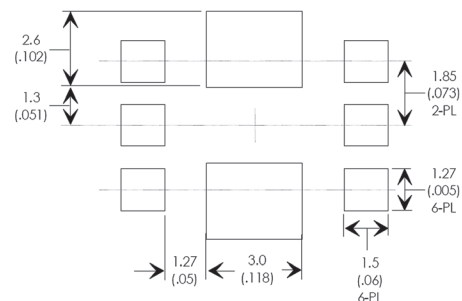
P **M** PM-CSXX
YYWW



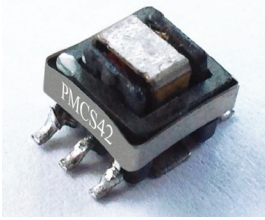
SCHEMATIC



RECOMMEND LAYOUT



Current Sense Inductors



— Designed for Automatic Pick-and-Place Applications —

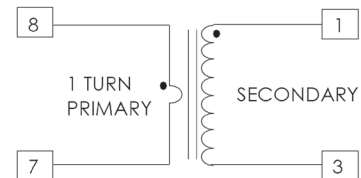
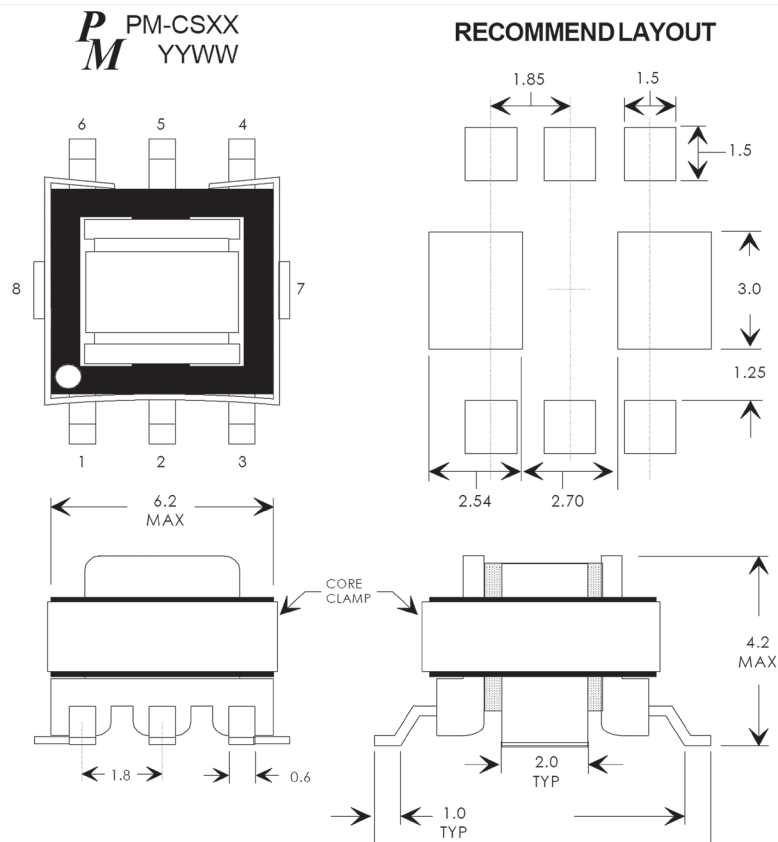
- ▶ High Current - Primary Rated
- ▶ Operating Frequency Range up to 1MHz
- ▶ Withstands Solder Reflow

ELECTRICAL RATINGS AT 25°C

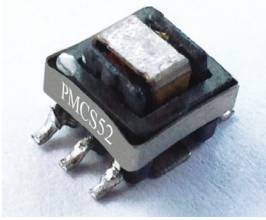
PART NUMBER	TURNS $N_s \pm 1\%$	SEC INDUCTANCE (mH Min.)	SEC DCR (Ohms Max.)	PRI CURRENT (Amps)	HIPOT (Vrms)
PM-CS40	1 : 20	65.0	0.5	20.0	500
PM-CS41	1 : 30	145.0	0.75	20.0	500
PM-CS42	1 : 40	264.0	1.05	20.0	500
PM-CS43	1 : 50	410.0	1.65	20.0	500
PM-CS44	1 : 60	590.0	2.0	20.0	500
PM-CS45	1 : 70	805.0	3.0	20.0	500
PM-CS46	1 : 100	1650.0	5.4	20.0	500
PM-CS47	1 : 125	2570.0	6.7	20.0	500
PM-CS48	1 : 200	6600.0	33.3	20.0	500

MECHANICAL

SCHEMATIC



Current Sense Inductors



— Designed for Automatic Pick-and-Place Applications —

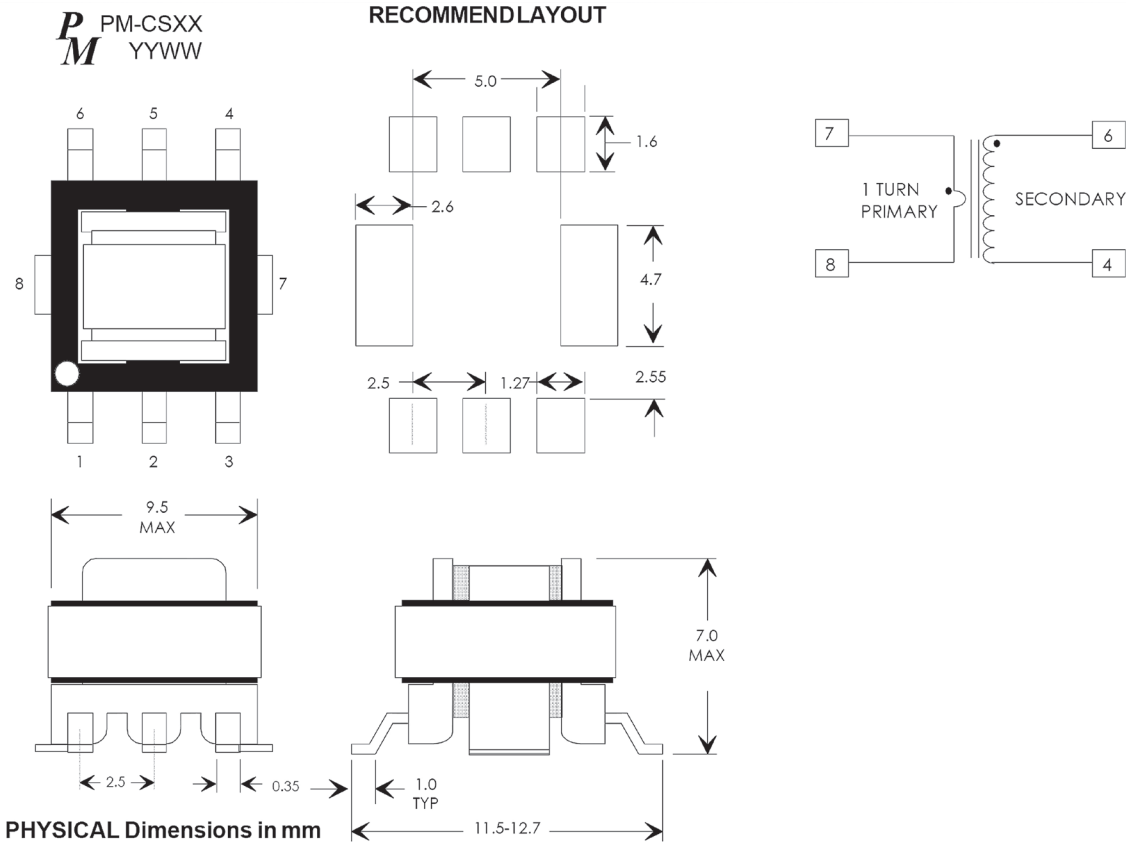
- ▶ High Current - Primary Rated
- ▶ Operating Frequency Range up to 1MHz
- ▶ Withstands Solder Reflow

ELECTRICAL RATINGS AT 25°C

PART NUMBER	TURNS $N_s \pm 1\%$	SEC INDUCTANCE (mH Min.)	SEC DCR (Ohms Max.)	PRI CURRENT (Amps)	HIPOT (Vrms)
PM-CS50	1 : 30	0.2	0.25	20.0	500
PM-CS51	1 : 50	0.55	0.65	20.0	500
PM-CS52	1 : 70	1.1	1.4	20.0	500
PM-CS53	1 : 100	2.1	3.0	20.0	500
PM-CS54	1 : 200	9.0	8.0	20.0	500
PM-CS55	1 : 300	20.0	20.0	20.0	500

MECHANICAL

SCHEMATIC



Split Bobbin High Isolation Power Transformers



— Designed with Split Bobbin for High 2500 Vrms Isolation —

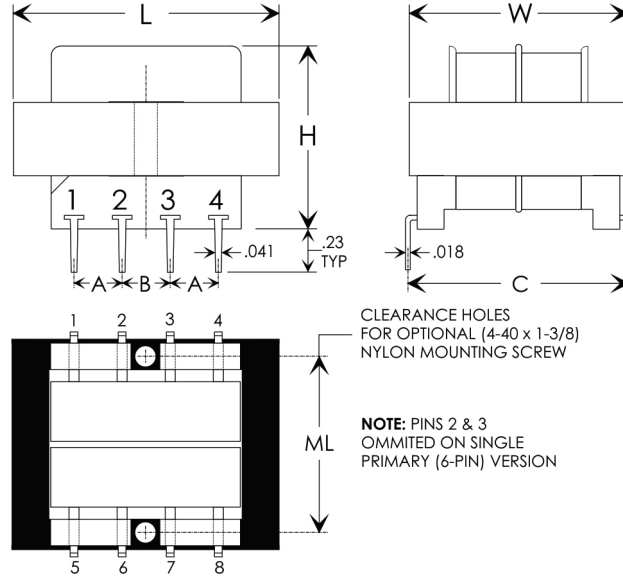
- Parts are UL and CSA Recognized Under UL File E244637
- 115Vac Single or 115Vac to 230Vac Dual Primaries, 50Hz to 60Hz
- Dual Secondaries May Be Series or Parallel Connected
- Low Capacitive Coupling Minimizes Line Noise
- 1.1 VA to 36 VA

ELECTRICAL RATINGS AT 25°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	6.0	10V C.T. @ 600mA	5V @ 1200mA
PSB-1012	PSB-1012D	12.0	10V C.T. @ 1200mA	5V @ 2400mA
PSB-1020	PSB-1020D	20.0	10V C.T. @ 2000mA	5V @ 4000mA
PSB-1036	PSB-1036D	36.0	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	6.0	12V C.T. @ 500mA	6V @ 1000mA
PSB-1212	PSB-1212D	12.0	12V C.T. @ 1000mA	6V @ 2000mA
PSB-1220	PSB-1220D	20.0	12V C.T. @ 1600mA	6V @ 3200mA
PSB-1236	PSB-1236D	36.0	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	6.0	16V C.T. @ 400mA	8V @ 800mA
PSB-1612	PSB-1612D	12.0	16V C.T. @ 800mA	8V @ 1600mA
PSB-1620	PSB-1620D	20.0	16V C.T. @ 1250mA	8V @ 2500mA
PSB-1636	PSB-1636D	36.0	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	6.0	20V C.T. @ 300mA	10V @ 600mA
PSB-2012	PSB-2012D	12.0	20V C.T. @ 600mA	10V @ 1200mA
PSB-2020	PSB-2020D	20.0	20V C.T. @ 1000mA	10V @ 2000mA
PSB-2036	PSB-2036D	36.0	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	6.0	24V C.T. @ 250mA	12V @ 500mA
PSB-2412	PSB-2412D	12.0	24V C.T. @ 500mA	12V @ 1000mA
PSB-2420	PSB-2420D	20.0	24V C.T. @ 800mA	12V @ 1600mA
PSB-2436	PSB-2436D	36.0	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	6.0	28V C.T. @ 200mA	14V @ 400mA
PSB-2812	PSB-2812D	12.0	28V C.T. @ 420mA	14V @ 840mA
PSB-2820	PSB-2820D	20.0	28V C.T. @ 700mA	14V @ 1400mA
PSB-2836	PSB-2836D	36.0	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	6.0	36V C.T. @ 170mA	18V @ 340mA
PSB-3612	PSB-3612D	12.0	36V C.T. @ 350mA	18V @ 700mA
PSB-3620	PSB-3620D	20.0	36V C.T. @ 550mA	18V @ 1100mA
PSB-3636	PSB-3636D	36.0	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	6.0	48V C.T. @ 125mA	24V @ 250mA
PSB-4812	PSB-4812D	12.0	48V C.T. @ 250mA	24V @ 500mA
PSB-4820	PSB-4820D	20.0	48V C.T. @ 400mA	24V @ 800mA
PSB-4836	PSB-4836D	36.0	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 @ 0mA
PSB-566	PSB-566D	6.0	56V C.T. @ 110mA	28V @ 220mA
PSB-5612	PSB-5612D	12.0	56V C.T. @ 220mA	28V @ 440mA
PSB-5620	PSB-5620D	20.0	56V C.T. @ 350mA	28V @ 700mA
PSB-5636	PSB-5636D	36.0	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	6.0	120V C.T. @ 50mA	60V @ 100mA
PSB-12012	PSB-12012D	12.0	120V C.T. @ 100mA	60V @ 200mA
PSB-12020	PSB-12020D	20.0	120V C.T. @ 160mA	60V @ 320mA
PSB-12036	PSB-12036D	36.0	120V C.T. @ 300mA	60V @ 600mA

PSB-xxx MECHANICAL DIMENSIONS

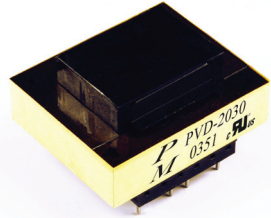


SIZE (VA)	DIMENSIONS IN INCHES						
	L	W	H	ML	A	B	C
1.1	1-3/8	1-1/8	0-15/16	N/A	0.250	0.250	1.200
2.4	1-3/8	1-1/8	1-3/16	N/A	0.250	0.250	1.200
6.0	1-5/8	1-5/16	1-5/16	1-1/16	0.250	0.350	1.280
12.0	1-7/8	1-9/16	1-7/16	1-1/4	0.300	0.400	1.410
20.0	2-1/4	1-7/8	1-7/16	1-1/2	0.300	0.400	1.600
36.0	2-5/8	2-3/16	1-9/16	N/A	0.400	0.400	1.850

NOTE: For intermediate values and/or custom designs, consult the Premier Magnetics Sales Department

APPLICATION	SCHEMATIC	
PSB-SERIES 6-SIZES: 1.1 TO 36VA	8-PIN DUAL PRIMARY	6-PIN SINGLE PRIMARY
SINGLE PRIMARY: 6-PIN, 115V - 50/60Hz		
DUAL PRIMARIES: 8-PIN PACKAGE Series for 230V - 50/60Hz Parallel for 115V - 50/60Hz	• INDICATES POLARITY	• INDICATES POLARITY

Shrouded Split Bobbin High Isolation Power Transformers



— Shrouded Split Bobbin Design Meets 4000 Vrms Isolation —

- Parts are UL and CSA Recognized Under UL File E244637
- 115Vac to 230Vac, 50Hz to 60Hz Dual Primaries
- Dual Secondaries may be Series or Parallel Connected
- Low Coupling Minimizes Line Noise
- Six (6) Sizes Ranging from 2.5 VA to 56 VA

ELECTRICAL RATINGS AT 25°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	5.0	10V C.T. @ .50A	5V @ 1.00A
PVD-1010	10.0	10V C.T. @ 1.00A	5V @ 2.00A
PVD-1020	20.0	10V C.T. @ 2.00A	5V @ 4.00A
PVD-1030	30.0	10V C.T. @ 3.00A	5V @ 6.00A
PVD-1056	56.0	10V C.T. @ 5.60A	5V @ 11.20A
PVD-122	2.5	12.6V C.T. @ .20A	6.3V @ .40A
PVD-125	5.0	12.6V C.T. @ .40A	6.3V @ .80A
PVD-1210	10.0	12.6V C.T. @ .80A	6.3V @ 1.60A
PVD-1220	20.0	12.6V C.T. @ 1.60A	6.3V @ 3.20A
PVD-1230	30.0	12.6V C.T. @ 2.40A	6.3V @ 4.80A
PVD-1256	56.0	12.6V C.T. @ 4.40A	6.3V @ 8.80A
PVD-162	2.5	16V C.T. @ .15A	8V @ .30A
PVD-165	5.0	16V C.T. @ .31A	8V @ .62A
PVD-1610	10.0	16V C.T. @ .62A	8V @ 1.25A
PVD-1620	20.0	16V C.T. @ 1.25A	8V @ 2.50A
PVD-1630	30.0	16V C.T. @ 1.90A	8V @ 3.80A
PVD-1656	56.0	16V C.T. @ 3.50A	8V @ 7.00A
PVD-202	2.5	20V C.T. @ .12A	10V @ .24A
PVD-205	5.0	20V C.T. @ .25A	10V @ .50A
PVD-2010	10.0	20V C.T. @ .50A	10V @ 1.00A
PVD-2020	20.0	20V C.T. @ 1.00A	10V @ 2.00A
PVD-2030	30.0	20V C.T. @ 1.50A	10V @ 3.00A
PVD-2056	56.0	20V C.T. @ 2.80A	10V @ 5.60A

P/N DUAL 115/230V	SIZE (VA)	SECONDARY RMS RATINGS	
		SERIES	PARALLEL
PVD-245	5.0	24V C.T. @ .21A	12V @ .42A
PVD-2410	10.0	24V C.T. @ .42A	12V @ .84A
PVD-2420	20.0	24V C.T. @ .83A	12V @ 1.66A
PVD-2430	30.0	24V C.T. @ 1.25A	12V @ 2.50A
PVD-2456	56.0	24V C.T. @ 2.33A	12V @ 4.66A
PVD-282	2.5	28V C.T. @ .09A	14V @ .18A
PVD-285	5.0	28V C.T. @ .18A	14V @ .36A
PVD-2810	10.0	28V C.T. @ .36A	14V @ .72A
PVD-2820	20.0	28V C.T. @ .72A	14V @ 1.44A
PVD-2830	30.0	28V C.T. @ 1.06A	14V @ 2.12A
PVD-2856	56.0	28V C.T. @ 2.00A	14V @ 4.00A
PVD-362	2.5	36V C.T. @ .07A	18V @ .14A
PVD-365	5.0	36V C.T. @ .14A	18V @ .28A
PVD-3610	10.0	36V C.T. @ .28A	18V @ .56A
PVD-3620	20.0	36V C.T. @ .56A	18V @ 1.12A
PVD-3630	30.0	36V C.T. @ .82A	18V @ 1.64A

APPLICATION

DUAL PRIMARIES:

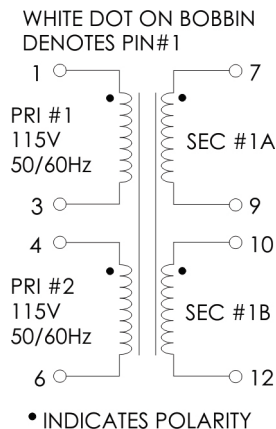
Series for 230V - 50/60Hz
Parallel for 115V - 50/60Hz

HI-POT:

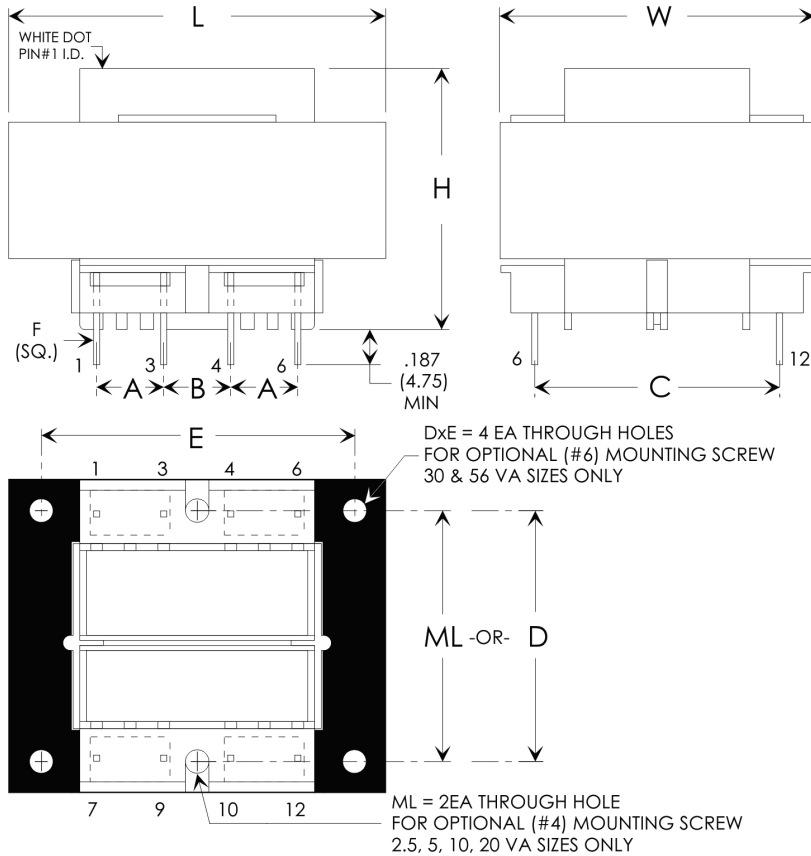
4000Vac Primary To Secondary
4000Vac Windings to Core
130°C Insulation System

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

SCHEMATIC



PVD-xxxx MECHANICAL DIMENSIONS



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	0.200	0.250	1.000	1-1/16	-----	-----	0.025
5.0	1-5/8	1-5/16	1.375	0.200	0.400	1.000	1-1/16	-----	-----	0.025
10.0	1-7/8	1-9/16	1.375	0.200	0.400	1.128	1-1/4	-----	-----	0.036
20.0	2-1/4	1-7/8	1.625	0.400	0.400	1.436	1-1/2	-----	-----	0.036
30.0	2-5/8	2-3/16	1.575	0.550	0.275	1.650	-----	1-3/4	2-3/16	0.045
56.0	3.000	2.500	1.820	0.600	0.300	1.866	-----	2.000	2-1/2	0.045

NOTES:

- 1) 4 hole corner pattern applies to 30VA and 56VA sizes only.
- 2) White dot on top of the part denotes the location for pin 1.
- 3) For intermediate values or custom designs, please consult the Premier Magnetics Sales Department.

Low Profile Dual Bobbin High Isolation Power Transformers

— Designed for Low Height PCB Applications —

- ▶ 115Vac to 230Vac, 50Hz to 60Hz Dual Primaries
- ▶ Dual Secondaries may be Series or Parallel Connected
- ▶ Split Bobbin Construction with 1500Vrms Isolation
- ▶ Construction Minimizes Radiated Magnetic Fields



ELECTRICAL RATINGS AT 25°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

APPLICATION

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

SPLIT BOBBIN:

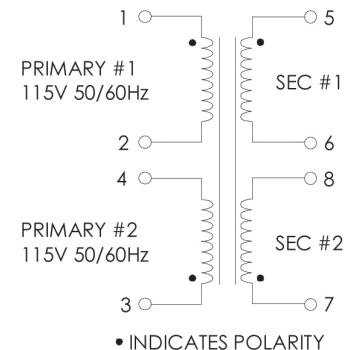
Provides high isolation and low coupling which minimizes line noise.

REGULATION:

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

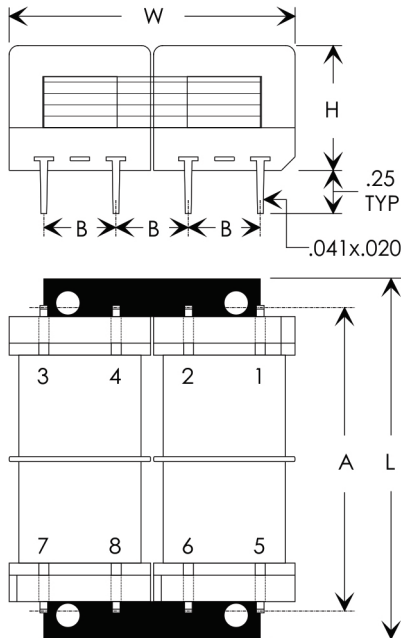
Note: primary and secondary windings are designed to be used as one primary & one secondary winding. They must each be used simultaneously either parallel or series connected.

SCHEMATIC

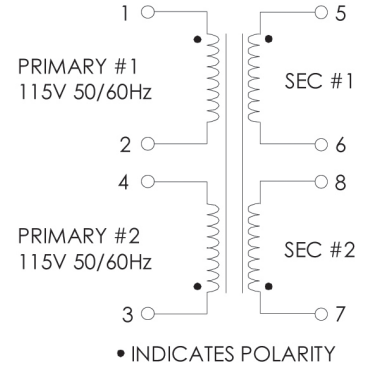


Low Profile Dual Bobbin High Isolation Power Transformers

PLP-XXXx MECHANICAL DIMENSIONS

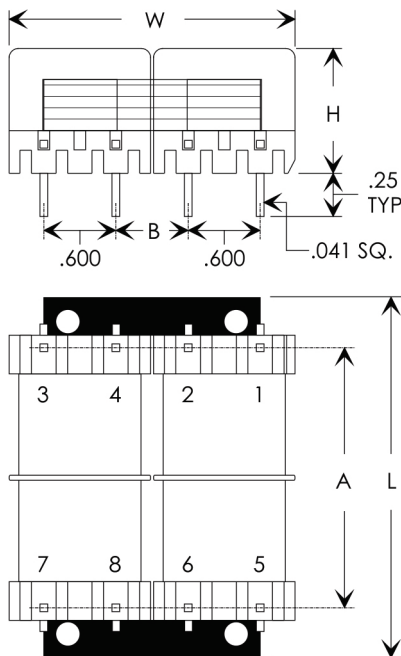


SCHEMATIC

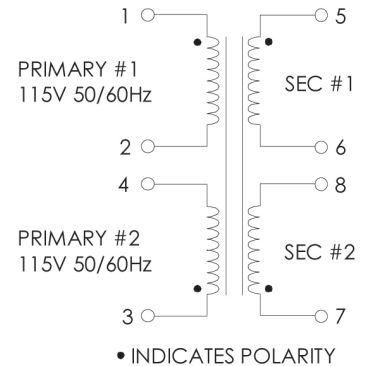


SIZE (VA)	DIMENSIONS IN INCHES				
	A	B	L	W	H
2.5	1.600	0.375	1.87	1.56	0.650
6.0	1.600	0.375	1.87	1.56	0.850
12.0	2.000	0.500	2.50	2.00	1.065

PLP-XXXx MECHANICAL DIMENSIONS

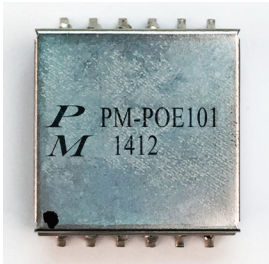


SCHEMATIC



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

Power Over Ethernet Transformers



— Designed for Use on Power Over Ethernet (PoE) Applications —

- ▶ Transformers for PoE Power Devices (PD)
- ▶ Multiple Power Ratings Available from 3W to 60W
- ▶ Designed to meet IEEE 802.3 Standards

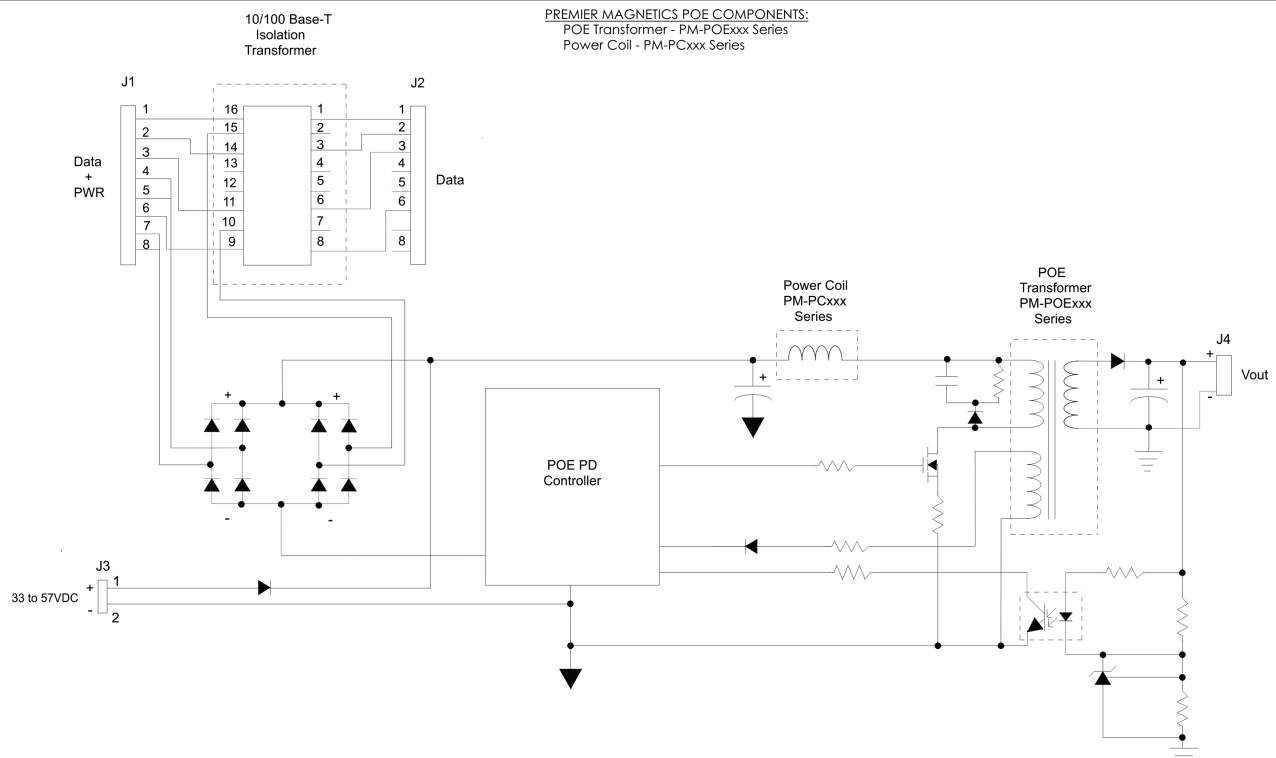
General Application Information

Premier Magnetics offers a wide range of PoE transformers to support the power circuit design of PoE Powered Device (PD) products. The PM-POExxx line of transformers listed in this catalog are designed to accommodate the complete range of PoE input and output voltages and power requirements to support the design of your PoE PD device.

A list of the PoE transformer offerings and specifications are provided on the pages that follow. Below is an illustration of a typical PoE PD power application highlighting the Premier

Magnetics components that support a PoE PD power circuit design including the PM-POExxx series of POE transformers. The circuit illustration receives an input voltage of 18-72 Volts from a PoE Power Sourcing Equipment (PSE) via a category 5 Ethernet cable to the Ethernet input connector on the PoE PD product. The power circuit onboard the PoE PD product transforms the input voltage to the correct value to provide the necessary voltage to power the PD product.

Schematic



Note: The application illustration above is a general diagram of a typical PoE PD power circuit highlighting the use of several Premier Magnetics component families that support a PoE PD product design such as the PoE transformer family, PM-POExxx; the 10/100 Base-T isolation transformer family; and the power coil family, PM-PCxxx.

Power Over Ethernet Transformers

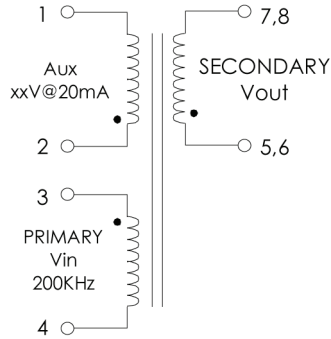
ELECTRICAL RATINGS AT 25°C

PART NUMBER	Application		Turn Ratio (± 3%)			Primary Ind μ H (±10%)	Leakage Ind μ H (Max.)	DCR (m Ω Max)			Hi-Pot	Schematics / Package
	Input	Output	Pri	Sec	Aux			Pri	Aux	Sec		
PM-POE001	V=33-57v, F=200Khz	V=3.3v/3W, 8v/20mA	1	0.083	0.208	500.0	7.5	1750	215	15	1500	A / 1
PM-POE002	V=33-57v, F=200Khz	V=3.3v/3W, 12v/20mA	1	0.182	0.682	310.0	5.0	1600	2600	45	1500	A / 1
PM-POE003	V=33-57v, F=200Khz	V=5.0v/3W, 8v/20mA	1	0.125	0.208	500.0	7.5	1750	215	35	1500	A / 1
PM-POE004	V=33-57v, F=200Khz	V=5.0v/3W, 12v/20mA	1	0.273	0.682	310.0	5.0	1600	2650	87	1500	A / 1
PM-POE005	V=33-57v, F=200Khz	V=12v/3W, 8v/20mA	1	0.286	0.204	520.0	7.5	1750	220	100	1500	A / 1
PM-POE006	V=33-57v, F=200Khz	V=12v/3W, 12v/20mA	1	0.682	0.682	310.0	5.0	1600	2600	550	1500	A / 1
PM-POE030	V=36-72v, F=300Khz	V=3.3v/10W, 5v/100mA	1	0.100	0.150	25.2	2.0	250	20	3.5	1500	A / 2
PM-POE031	V=33-57v, F=200Khz	V=3.3v/7W, 8v/20mA	1	0.083	0.208	253.0	7.5	420	115	7.5	1500	A / 2
PM-POE033	V=33-57v, F=200Khz	V=3.3v/7W, 12v/20mA	1	0.182	0.682	155.0	5.0	530	900	31	1500	A / 2
PM-POE034	V=9-50v, F=200Khz	V=3.3v/10W, 8v/20mA	1	0.222	0.555	20.4	1.5	80	150	7.5	1500	A / 2
PM-POE035	V=9-50v, F=200Khz	V=3.3v/10W, 5v/20mA	1	0.444	0.388	20.4	1.5	80	105	30	1500	A / 2
PM-POE036	V=33-57v, F=200Khz	V=5v/7W, 8v/20mA	1	0.125	0.208	253.0	7.5	420	115	16	1500	A / 2
PM-POE037	V=33-57v, F=200Khz	V=5v/7W, 12v/20mA	1	0.273	0.682	155.0	5.0	570	1000	40	1500	A / 2
PM-POE038	V=33-57v, F=200Khz	V=12v/7W, 8v/20mA	1	0.286	0.204	264.0	7.5	800	115	45	1500	A / 2
PM-POE039	V=33-57v, F=200Khz	V=12v/7W, 12v/20mA	1	0.682	0.682	155.0	5.0	540	920	370	1500	A / 2
PM-POE070	V=33-57v, F=200Khz	V=3.3v/13.5W, 8v/20mA	1	0.083	0.208	127.0	7.5	440	88	6	1500	B / 3
PM-POE071	V=33-57v, F=200Khz	V=3.3v/11W, 12v/20mA	1	0.167	0.639	155.5	5.0	330	650	11	1500	C / 3
PM-POE072	V=33-57v, F=200Khz	V=3.3v/13.5W, 12v/20mA	1	0.182	0.682	77.4	5.0	100	270	8.5	1500	B / 3
PM-POE073	V=33-57v, F=200Khz	V=5v/13.5W, 8v/20mA	1	0.125	0.208	127.0	7.5	460	94	12	1500	B / 3
PM-POE074	V=33-57v, F=200Khz	V=5v/13.5W, 12v/20mA	1	0.273	0.683	77.4	0.8	220	250	18	1500	B / 3
PM-POE075	V=33-57v, F=200Khz	V=12v/13.5W, 8v/20mA	1	0.292	0.208	127.0	7.5	460	94	55	1500	B / 3
PM-POE076	V=33-57v, F=200Khz	V=12v/13.5W, 12v/20mA	1	0.682	0.682	77.4	5.0	100	270	75	1500	B / 3
PM-POE077	V=33-57v, F=200Khz	V=15v/27W, 12v/20mA	1	0.470	0.294	28.9	1.0	58	55	27	1500	B / 3
PM-POE080	V=33-57v, F=400Khz	V=10v/40W, 12v/60mA	1	0.417	0.583	15.0	2.0	75	50	50	1500	E / 4
PM-POE081	V=33-57v, F=200Khz	V=3.3v/30W, 12v/60mA	1	0.09	0.33	42.0	3.0	70	5	220	1500	F / 4
PM-POE082	V=33-57v, F=200Khz	V=5v/30W, 12v/60mA	1	0.14	0.33	42.0	1.6	70	5	225	1500	F / 4
PM-POE083	V=33-57v, F=200Khz	V=12v/30W, 12v/60mA	1	0.33	0.33	42.0	0.6	65	18	200	1500	F / 4
PM-POE084	V=33-57v, F=200Khz	V=19.5v/30W, 12v/60mA	1	0.56	0.33	42.0	0.45	62	40	200	1500	F / 4
PM-POE085	V=33-57v, F=200Khz	V=24v/30W, 12v/60mA	1	0.67	0.33	42.0	0.32	62	55	200	1500	F / 4
PM-POE086	V=33-57v, F=200Khz	V=20.5v/30W, 12v/60mA	1	0.811	0.33	32.7	0.5	62	50	200	1500	F / 4
PM-POE087	V=36-57v, F=200Khz	V=20.5v/31W, 2x12v/30mA	1	0.714	0.429	36.0	3.0	115	1150	400	1500	K / 4
PM-POE088*	V=36-57v, F=200Khz	V=5/10W&15V@22.5W	1	0.17/5	0.29	50.0	3.0	100	30/50	60	1500	H / 4
PM-POE089*	V=36-57v, F=200Khz	V=5/10W&15V@22.5W	1	0.17/5	0.28	50.0	3.0	100	30/50	60	1500	H / 6
PM-POE090	V=18-57v	V=3.3v/25W, 11v/20mA	1	0.12	0.41	50.0	2.2	26	320	4	1500	F / 5
PM-POE091	V=18-57v	V=5v/25W, 11v/20mA	1	0.18	0.41	50.0	1.1	26	320	8	1500	F / 5
PM-POE092	V=18-57v	V=9v/25W, 11v/20mA	1	0.35	0.41	50.0	0.47	26	320	14	1500	F / 5
PM-POE093	V=18-57v	V=12v/25W, 11v/20mA	1	0.47	0.41	50.0	0.41	26	320	20	1500	F / 5
PM-POE094	V=18-57v	V=15v/25W, 11v/20mA	1	0.59	0.41	50.0	0.38	26	320	37	1500	F / 5
PM-POE101*	Vin=36-72v	V=12v/60W, 12v/20mA	1	0.40	0.40	30.0	1.0	55	200	15	1500	G / 7
PM-POE102	Vin=36-72v	V=18v/60W, 12v/20mA	1	0.60	0.40	30.0	1.0	55	200	25	1500	G / 7
PM-POE103*	Vin=36-72v	V=24v/60W, 12v/20mA	1	0.80	0.40	30.0	1.0	55	200	40	1500	G / 7
PM-POE104*	Vin=36-72v	V=36v/60W, 12v/20mA	1	1.20	0.40	30.0	1.0	55	200	85	1500	G / 7
PM-POE105	Vin=36-72v	V=48v/60W, 12v/20mA	1	1.60	0.40	30.0	1.0	55	200	85	1500	G / 7

* For AKROS chip set # AS1844, AS1854, AS1860

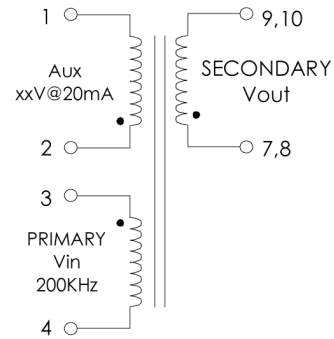
Power Over Ethernet Transformers

SCHEMATIC A



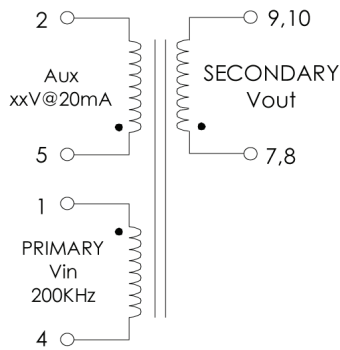
**PM-POE001,002,003,004,005,006
031,033,034,035,036,037,038,039**

SCHEMATIC B



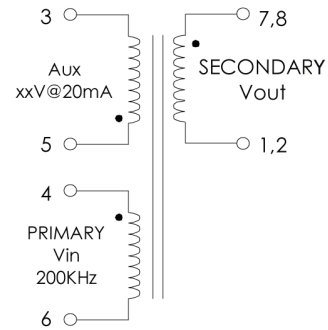
PM-POE070,072,073,074,075,076,077

SCHEMATIC C



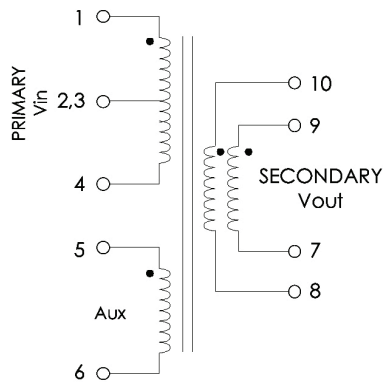
PM-POE071

SCHEMATIC D



PM-POE030

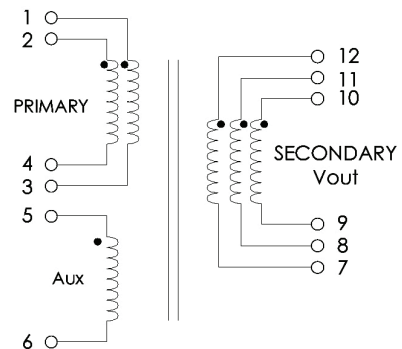
SCHEMATIC E



PM-POE080

Connect 2&3 for Pri, 9 & 10, 7 & 8 for Sec on PCB

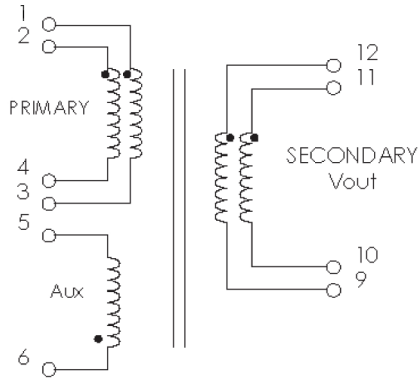
SCHEMATIC F



PM-POE081-86

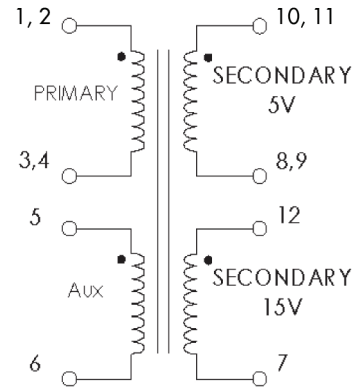
PM-POE090-094

SCHEMATIC G



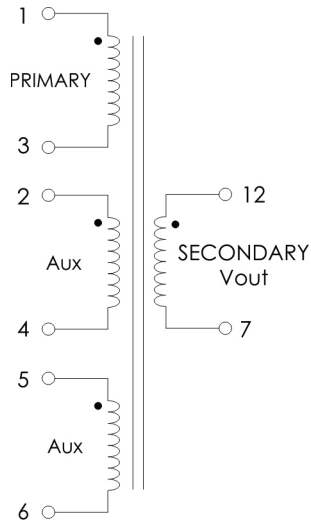
PM-POE-101-105

SCHEMATIC H



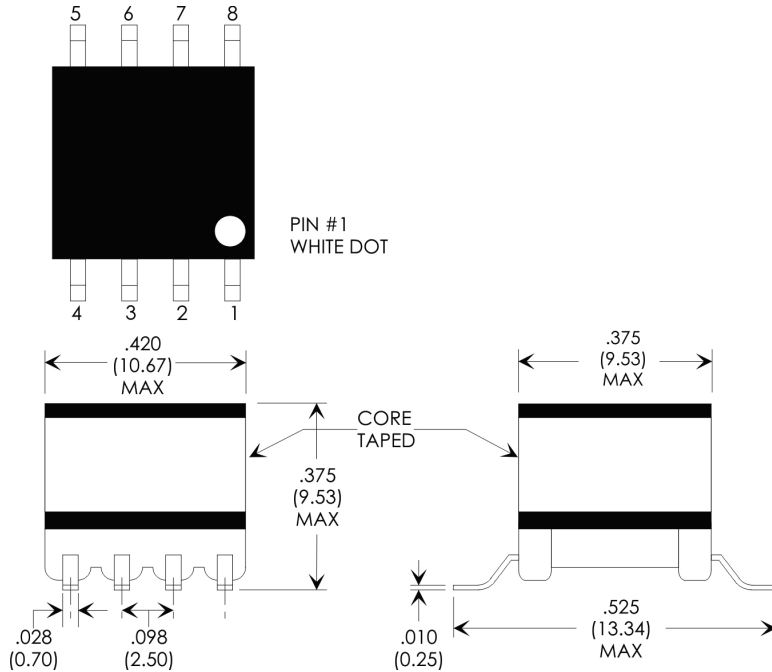
PM-POE-088-089

SCHEMATIC K



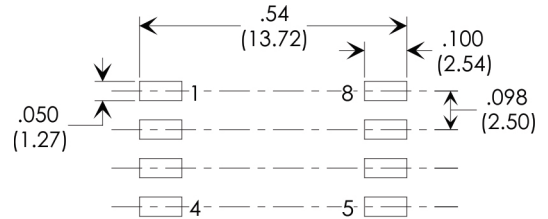
PM-POE087

PACKAGE 1

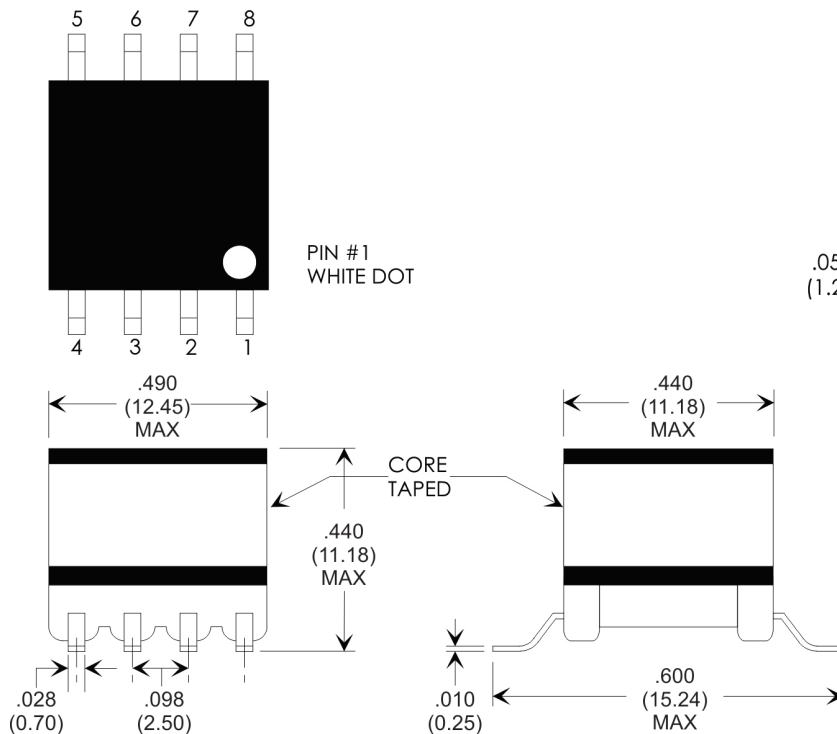


RECOMMENDED P.C.B. LAYOUT

Dimensions in inches (mm)

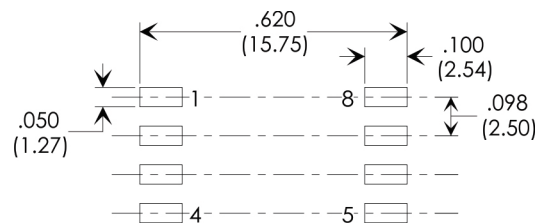


PACKAGE 2

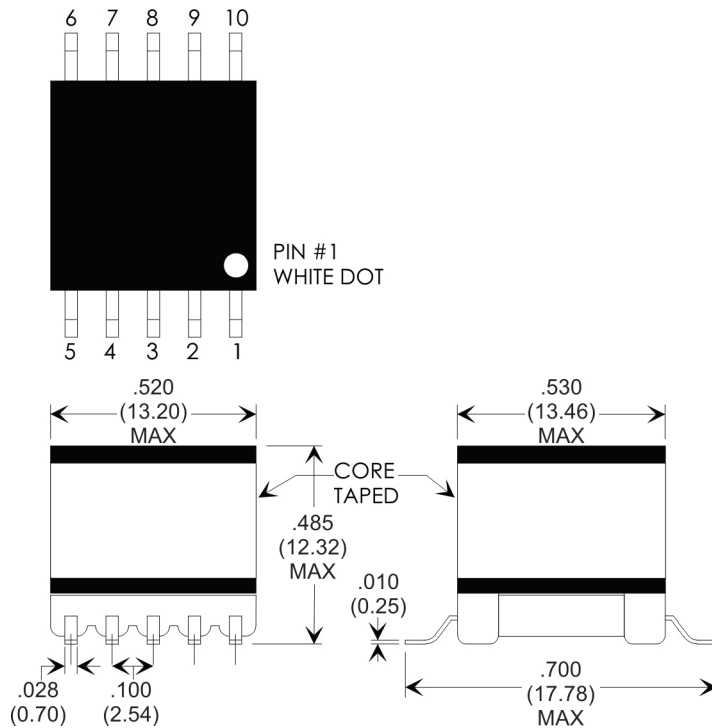


RECOMMENDED P.C.B. LAYOUT

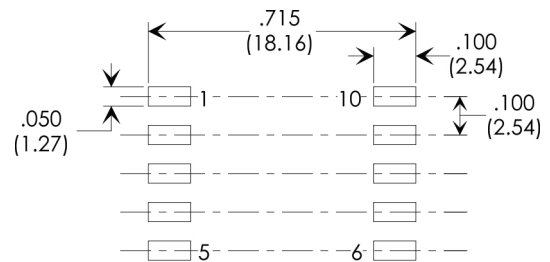
Dimensions in inches (mm)



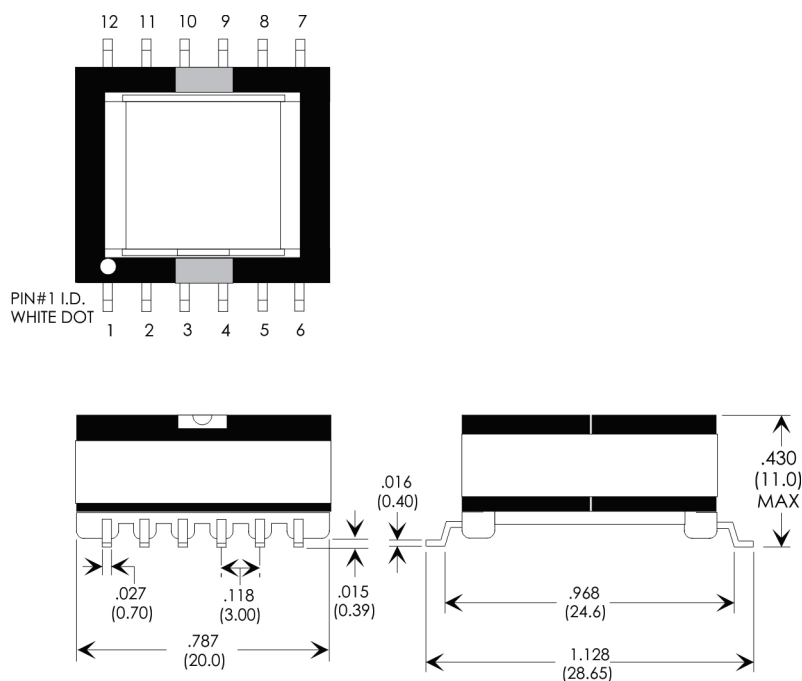
PACKAGE 3



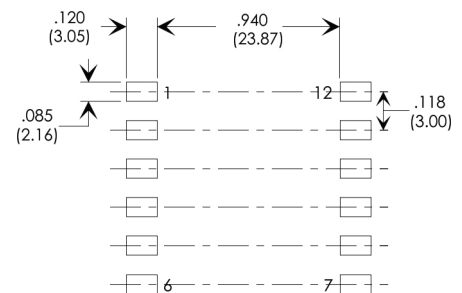
RECOMMENDED P.C.B. LAYOUT



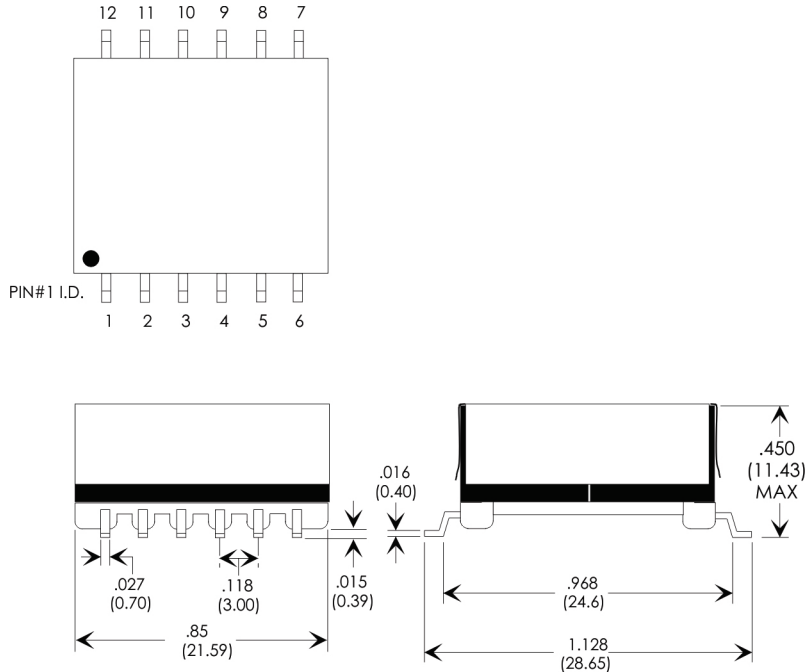
PACKAGE 4



RECOMMENDED P.C.B. LAYOUT

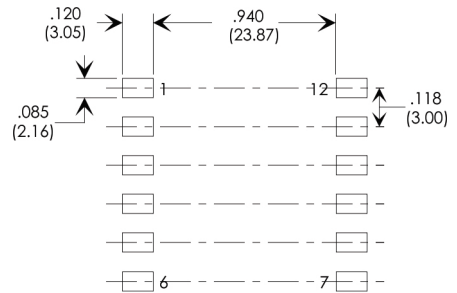


PACKAGE 5

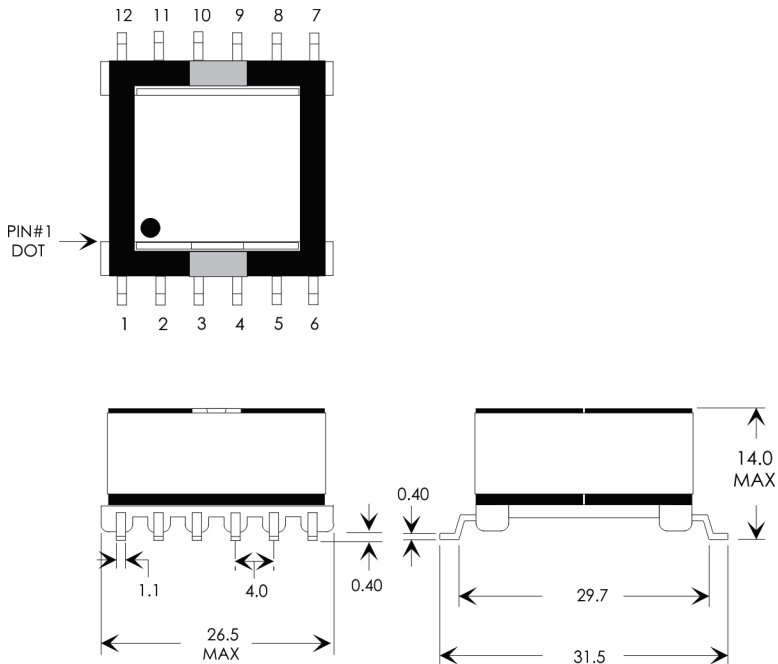


RECOMMENDED P.C.B. LAYOUT

Dimensions in inches (mm)

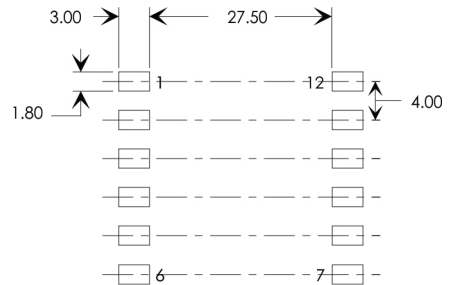


PACKAGE 6

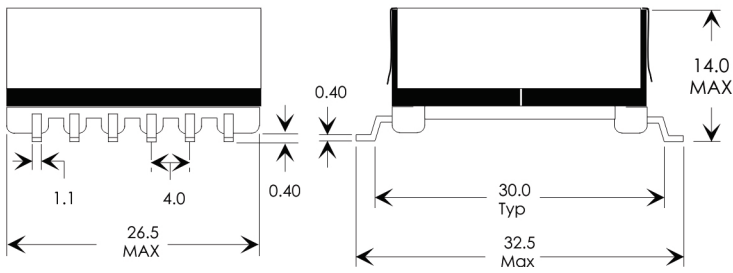
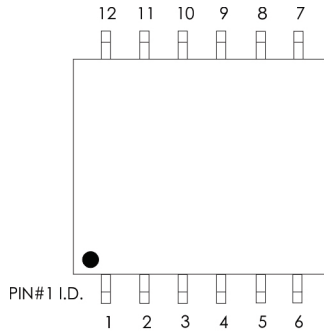


RECOMMENDED P.C.B. LAYOUT

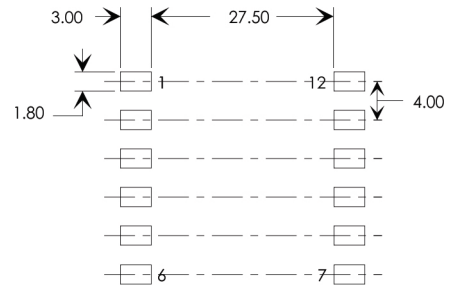
Dimensions in mm



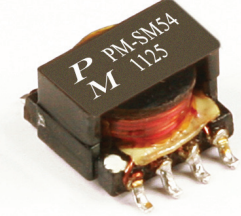
PACKAGE 7



RECOMMENDED P.C.B. LAYOUT Dimensions in mm



DC/DC and Push-Pull Transformers



- ▶ Designed for use with Leading controller Chips: Linear Technology-Maxim Integrated-Analog Devices
- ▶ Designed For >125kHz, 50% Duty Cycle Push-Pull Operation @ 1.0 Watt Output
- ▶ Thru-Hole and Low profile 8-Pin SMD package

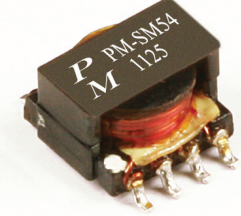
ELECTRICAL RATINGS AT 25°C

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	140.0	550	20	Feed Back Output	THRU*
PM-SM03	LT1071	12.0	9.0	1000	110.0	550	35	Feed Back Output	THRU*
PM-SM04	LT1071	24.0	5.0	2000	200.0	550	40	Feed Back Output	THRU*
PM-SM05	LT1071	24.0	5.0	2000	200.0	550	40	Feed Back Output	THRU*
PM-SM07	LT1070	12.0	5.0	2000	50.0	550	40	Feed Back Output	THRU*
PM-SM09	LT1070	12.0	5.0	4000	135.0	250	50	Feed Back Output	THRU*

PART NUMBER	DESIGNED FOR USE WITH	TURNS RATIO (Pri:Sec +5%)	PRIMARY OCL (μ H Min.)	PRIMARY PINS	TYPICAL APPLICATION	PRI/SEC HI-POT (Vrms)	GENERAL CHARACTERISTICS
PM-SM15	MAX253	1CT:1.00	150.0	1-4	+5V to +10V	1500	Volt Doubler Driving
PM-SM16	MAX253	1CT:1.38CT	150.0	1-4	+5V to +5V	1500	Full Wave Center Tap
PM-SM17	MAX253	1CT:2.00CT	150.0	1-4	+3.3V to +5V	1500	Full Wave Center Tap
PM-SM18	MAX253	1CT:0.667	150.0	1-4	+5V to +5V	1500	Full Wave Bridge
PM-SM19	MAX253	1CT:1.6 CT	150.0	1-4	+3.3V to +5V	1500	Full Wave Center Tap

PART NUMBER	DESIGNED FOR USE WITH	PRI/SEC VOLTAGE	PRIMARY PIN 4-3 (μ H Min.)	LEAKAGE INDUCTANCE	DCR PER WDG		VOLT-TIME (V- μ HSec)	PRI/SEC HI-POT (Vrms)
					Pri	Sec		
PM-SM50	ADMxxxxx	5V to 6V	45.6	1.0	0.130	0.260	34.4	2500
PM-SM51	ADMxxxxx	3.3V to 6V	17.8	0.43	0.086	0.230	21.5	2500
PM-SM54	ADMxxxxx	3.3 to 6V	17.8	0.43	0.086	0.232	22.0	2500

DC/DC and Push-Pull Transformers



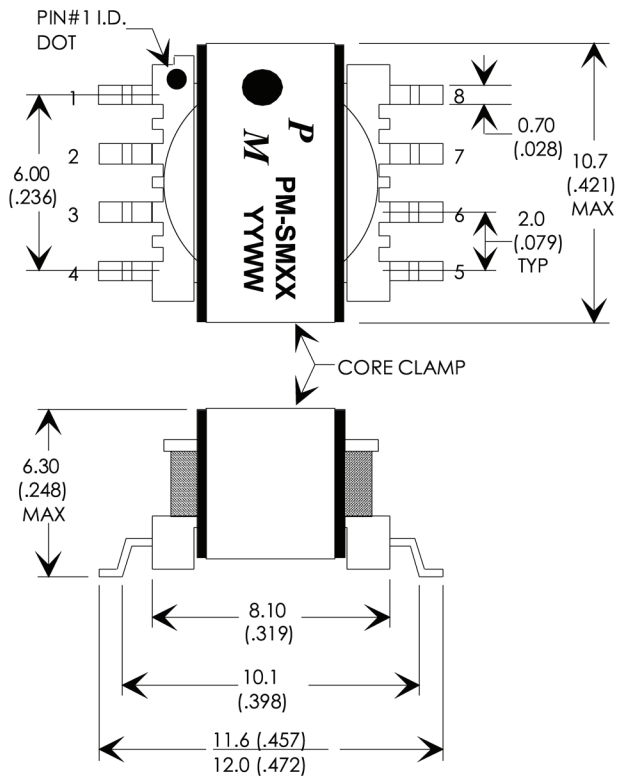
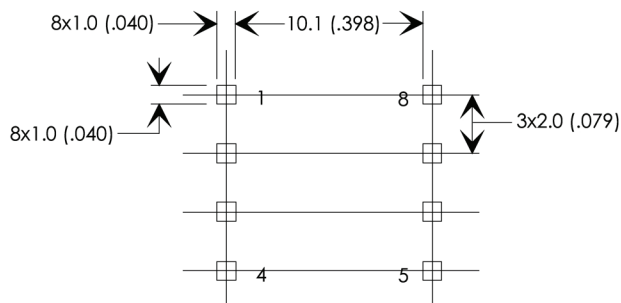
- ▶ Designed for use with Leading controller Chips: Linear Technology-Maxim Integrated-Analog Devices
- ▶ Designed For >125kHz, 50% Duty Cycle Push-Pull Operation @ 1.0 Watt Output
- ▶ Low profile 8-Pin SMD package

MECHANICAL

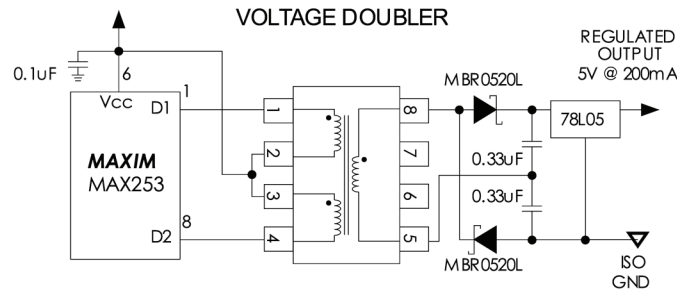
TYPICAL APPLICATIONS

RECOMMENDED P.C.B. LAYOUT

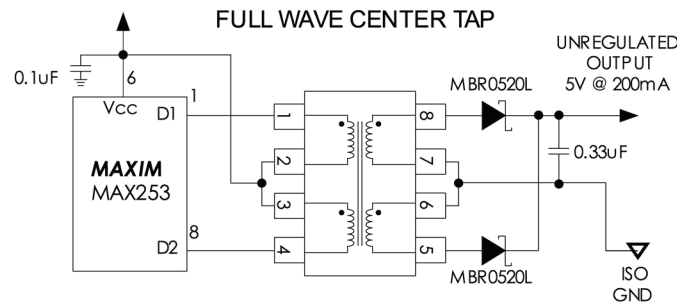
Dimensions in mm (inches)



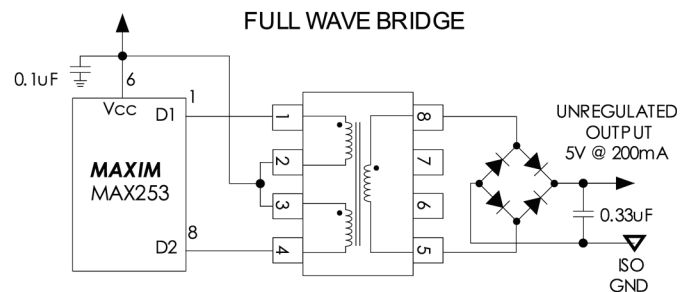
VOLTAGE DOUBLER



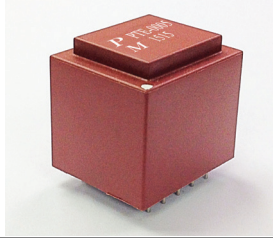
FULL WAVE CENTER TAP



FULL WAVE BRIDGE



Encapsulated Power Transformers



- ▶ 115V Single -OR- 230V Primaries, 50Hz to 60Hz
- ▶ Low Capacitive Coupling Minimizes Line Noise
- ▶ 2.8VA
- ▶ 1500Vrms Isolation (Hipot)

ELECTRICAL RATINGS AT 25°C

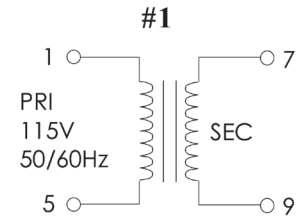
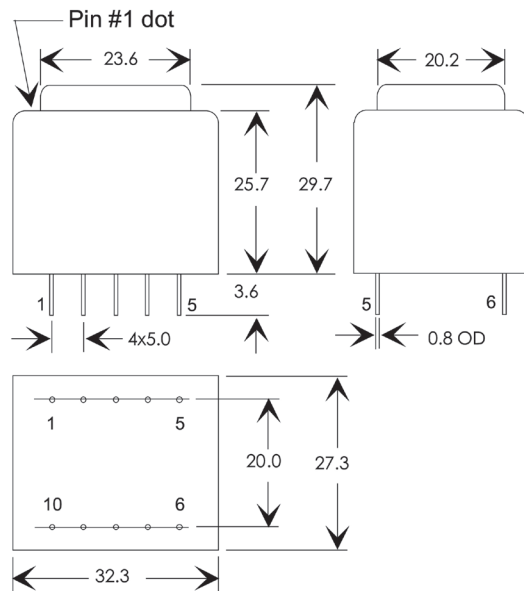
PART NUMBER	POWER VA	PRIMARY Vin	SECONDARY		PACKAGE/ SCHEMATIC
			V1	I1 (mA)	
PTE-0001	2.3	115.0	4.5	511.0	#1
PTE-0002	2.3	115.0	6.0	383.0	#1
PTE-0003	2.3	115.0	7.5	307.0	#1
PTE-0004	2.3	115.0	9.0	256.0	#1
PTE-0005	2.3	115.0	12.0	192.0	#1
PTE-0006	2.3	115.0	15.0	153.0	#1
PTE-0007	2.3	115.0	18.0	128.0	#1
PTE-0008	2.3	115.0	24.0	96.0	#1
PTE-0021	2.3	230.0	4.5	511.0	#1
PTE-0022	2.3	230.0	6.0	383.0	#1
PTE-0023	2.3	230.0	7.5	307.0	#1
PTE-0024	2.3	230.0	9.0	256.0	#1
PTE-0025	2.3	230.0	12.0	192.0	#1
PTE-0026	2.3	230.0	15.0	153.0	#1
PTE-0027	2.3	230.0	18.0	128.0	#1
PTE-0028	2.3	230.0	24.0	96.0	#1
PTE-0041	2.8	115.0	4.5	622.0	#1
PTE-0042	2.8	115.0	6.0	467.0	#1
PTE-0043	2.8	115.0	7.5	373.0	#1
PTE-0044	2.8	115.0	9.0	311.0	#1
PTE-0045	2.8	115.0	12.0	233.0	#1
PTE-0046	2.8	115.0	15.0	187.0	#1
PTE-0047	2.8	115.0	18.0	156.0	#1
PTE-0048	2.8	115.0	24.0	117.0	#1
PTE-0061	2.8	230.0	4.5	622.0	#1
PTE-0062	2.8	230.0	6.0	467.0	#1
PTE-0063	2.8	230.0	7.5	373.0	#1
PTE-0064	2.8	230.0	9.0	311.0	#1
PTE-0065	2.8	230.0	12.0	233.0	#1
PTE-0066	2.8	230.0	15.0	187.0	#1
PTE-0067	2.8	230.0	18.0	156.0	#1
PTE-0068	2.8	230.0	24.0	117.0	#1

MECHANICAL

SCHEMATIC

MARKING ON TOP

P PTE-XXXX
M YYWW



Flat Helix Inductors



- ▶ Designed for Flat Helix Winding Coil high current and low resistance
- ▶ Low Temperature Rise, Reduce Size, High Efficiency
- ▶ Winding to core isolation is 500Vrms

ELECTRICAL RATINGS AT 25°C

PART NUMBER	INDUCTANCE (μ H) $\pm$ 20% @ 100 kHz, 0.1 Vrms		ISAT (Adc)	DCR max @ 20°C	PACKAGE
	@ 0 Adc	@ Isat			
PM-FH001	6.0	3.8	22.0	1.3	A1
PM-FH002	7.5	5.5	18.5	1.8	A1
PM-FH003	12.0	9.8	14.0	2.9	A1
PM-FH004	18.0	15.3	11.0	5.0	A1
PM-FH011	8.0	5.5	20.0	1.8	A2
PM-FH012	12.0	9.0	15.5	2.7	A2
PM-FH013	17.0	13.5	12.7	4.0	A2
PM-FH014	27.0	22.0	10.0	6.9	A2
PM-FH021	6.0	3.4	36.0	0.8	A3
PM-FH022	10.5	7.7	24.0	1.5	A3
PM-FH023	17.2	13.7	18.0	2.8	A3
PM-FH024	35.0	30.9	12.0	5.9	A3
PM-FH031	8.3	5.9	31.0	1.1	A4
PM-FH032	12.7	10.5	23.5	1.9	A4
PM-FH033	25.7	23.7	15.5	4.0	A4
PM-FH034	48.0	47.5	11.0	8.3	A4

PART NUMBER	INDUCTANCE (μ H) $\pm$ 10% @ 500 kHz, 0.1 V	DCR (mOhm)	SRF typ. (Mhz)	ISAT			PACKAGE
				10% drop	20% drop	30% drop	
PM-FH041	1.5	1.62	60.0	80.0	>100.0	>100	B1
PM-FH042	2.2	1.62	50.0	65.0	75.0	80.0	B1
PM-FH043	3.3	1.62	40.0	48.0	54.0	57.0	B1
PM-FH044	4.7	1.62	30.0	33.0	36.9	39.0	B1
PM-FH045	6.8	1.62	25.0	22.0	26.0	27.8	B1
PM-FH046	10.0	1.62	20.0	13.0	16.2	17.6	B1
PM-FH047	15.0	1.62	15.0	7.5	9.8	11.0	B1
PM-FH048	22.0	1.62	10.0	4.5	6.0	6.8	B1
PM-FH049	33.0	1.62	7.0	2.0	2.6	3.3	B1

Flat Helix Inductors



- ▶ Designed for Flat Helix Winding Coil high current and low resistance
- ▶ Low Temperature Rise, Reduce Size, High Efficiency
- ▶ Winding to core isolation is 500Vrms

ELECTRICAL RATINGS AT 25°C

PART NUMBER	INDUCTANCE (μ H) $\pm$ 10% @ 500 kHz, 0.1 V	DCR (mOhm)	SRF typ. (Mhz)	ISAT			PACKAGE
				10% drop	20% drop	30% drop	
PM-FH056	2.2	2.01	40.0	78.0	88.0	94.0	B2
PM-FH057	3.3	2.01	30.0	62.0	66.9	68.4	B2
PM-FH058	4.7	2.01	25.0	42.0	48.0	50.1	B2
PM-FH059	6.8	2.01	20.0	30.0	34.5	36.2	B2
PM-FH060	10.0	2.01	15.0	18.0	21.5	23.4	B2
PM-FH061	15.0	2.01	12.0	11.5	14.0	15.2	B2
PM-FH062	22.0	2.01	10.0	7.0	8.6	9.6	B2
PM-FH063	33.0	2.01	18.0	4.0	5.1	5.9	B2
PM-FH071	3.3	2.82	40.0	76.0	83.0	90.0	B3
PM-FH072	4.7	2.82	30.0	59.0	61.2	62.4	B3
PM-FH073	6.8	2.82	25.0	42.0	45.0	45.9	B3
PM-FH074	10.0	2.82	20.0	28.0	31.2	32.1	B3
PM-FH075	15.0	2.82	16.0	18.0	21.2	21.9	B3
PM-FH076	22.0	2.82	15.0	12.0	14.0	15.0	B3
PM-FH077	33.0	2.82	10.0	7.0	8.7	9.6	B3

PART NUMBER	INDUCTANCE (μ H) $\pm$ 20% @ 100 kHz, 0.1 Vrms @ 0 Adc @ Isat		ISAT (Adc)	DCR max @ 20°C	PACKAGE
PM-FH085	6.0	4.8	34.0	1.2	C1
PM-FH086	10.5	8.6	24.0	2.2	C1
PM-FH087	22.0	19.4	16.0	4.8	C1
PM-FH088	37.5	34.5	12.0	9.0	C1
PM-FH095	7.2	3.8	38.0	0.7	A5
PM-FH096	9.4	5.9	30.0	1.1	A5
PM-FH097	19.0	15.2	19.0	2.7	A5
PM-FH098	38.0	34.2	13.0	5.5	A5
PM-FH105	9.1	6.3	35.0	1.1	A6
PM-FH106	14.2	11.2	27.0	1.7	A6
PM-FH107	34.0	29.5	16.5	4.2	A6
PM-FH108	60.0	56.6	12.0	8.1	A6

Flat Helix Inductors



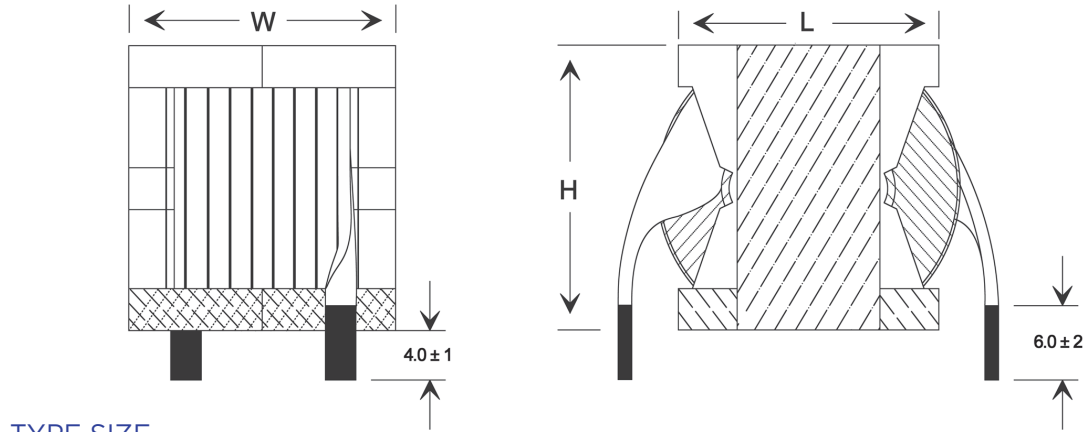
- ▶ Designed for Flat Helix Winding Coil high current and low resistance
- ▶ Low Temperature Rise, Reduce Size, High Efficiency
- ▶ Winding to core isolation is 500Vrms

ELECTRICAL RATINGS AT 25°C

PART NUMBER	INDUCTANCE (μ H) $\pm$ 20%		ISAT (Adc)	DCR max @ 20°C	PACKAGE
	@ 100 kHz, 0.1 Vrms @ 0 Adc	@ Isat			
PM-FH115	12.0	9.0	30.0	1.4	A7
PM-FH116	21.0	17.0	24.0	2.2	A7
PM-FH117	42.0	40.5	15.5	5.4	A7
PM-FH118	84.0	80.8	11.0	10.8	A7
PM-FH125	9.0	6.4	47.0	1.0	A8
PM-FH126	16.0	13.0	33.0	1.6	A8
PM-FH127	22.0	19.2	28.0	2.5	A8
PM-FH128	56.0	52.6	17.0	5.9	A8
PM-FH129	88.0	82.1	13.5	9.2	A8
PM-FH135	12.0	8.0	38.0	1.3	C2
PM-FH136	19.0	15.0	27.0	3.9	C2
PM-FH137	45.0	40.0	18.0	8.4	C2
PM-FH138	72.0	65.0	13.0	18.0	C2
PM-FH145	9.0	5.5	52.0	0.9	C3
PM-FH146	15.0	11.0	39.0	1.5	C3
PM-FH147	32.0	30.0	25.0	3.3	C3
PM-FH148	48.0	42.0	20.0	5.4	C3
PM-FH155	16.0	13.0	40.0	1.5	C4
PM-FH156	22.0	19.0	33.0	2.3	C4
PM-FH157	55.0	52.0	20.0	5.9	C4
PM-FH158	80.0	77.0	16.0	9.0	C4
PM-FH165	6.5	4.0	75.0	0.6	C5
PM-FH166	55.0	50.0	30.0	6.2	C5
PM-FH167	38.0	34.0	26.0	3.5	C5
PM-FH168	200.0	200.0	10.0	12.0	C5
PM-FH169	260.0	255.0	6.5	18.0	C5
PM-FH175	9.0	6.0	70.0	0.65	C6
PM-FH176	11.0	8.0	57.0	1.1	C6
PM-FH177	16.5	13.0	47.0	1.3	C6
PM-FH178	27.5	24.0	35.0	2.2	C6
PM-FH179	41.0	36.5	28.0	3.5	C6
PM-FH180	100.0	94.0	18.0	8.6	C6
PM-FH181	160.0	155.0	14.0	14.0	C6

Flat Helix Inductors

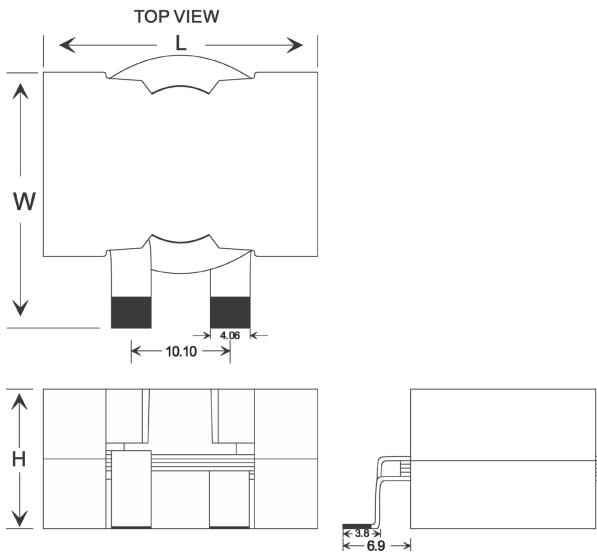
PACKAGE A



TYPE SIZE

	A1	A2	A3	A4	A5	A6	A7	A8
L (mm)	21.0	21.0	26.5	26.5	32.0	32.0	32.0	36.0
W (mm)	17.5	21.5	21.5	26.0	21.7	26.6	31.5	36.5
H (mm)	23.0	23.0	28.5	28.5	34.0	34.0	34.0	37.0

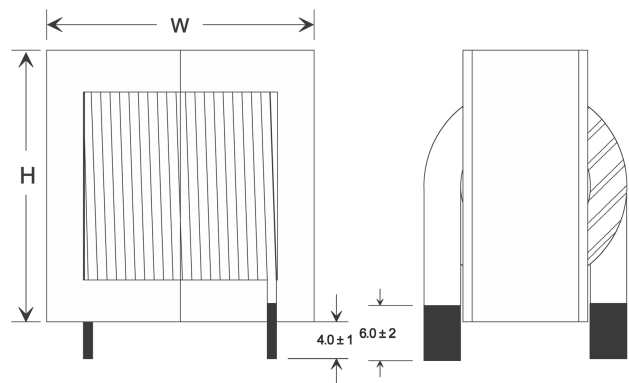
PACKAGE B



TYPE SIZE

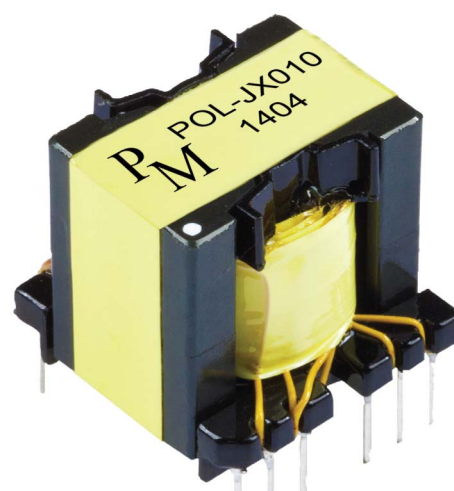
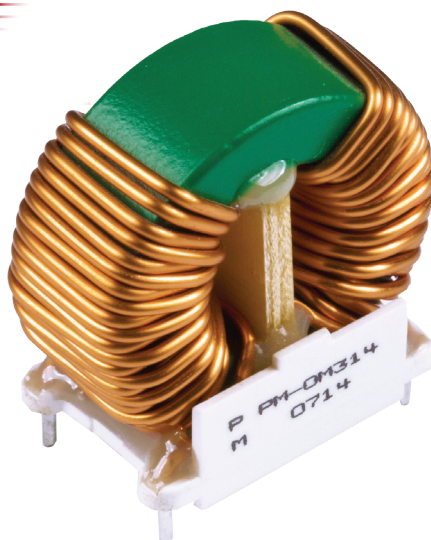
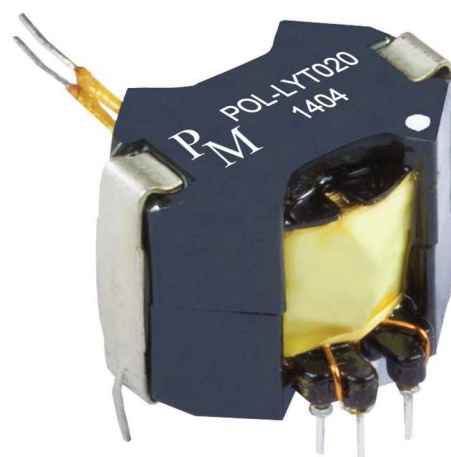
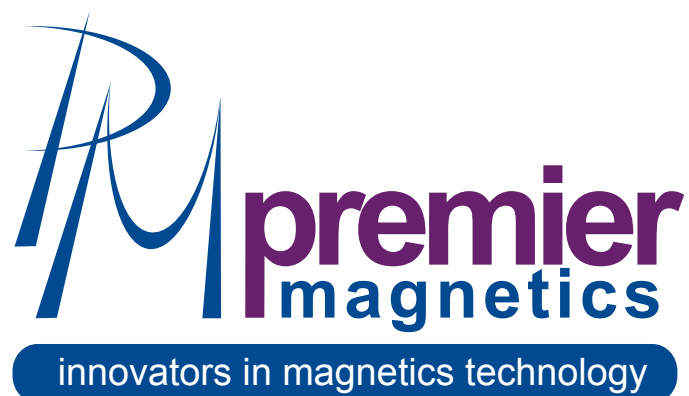
	B1	B2	B3
L (mm)	28.0	28.0	28.0
W (mm)	28.0	28.0	28.0
H (mm)	14.3	14.3	16.7

PACKAGE C



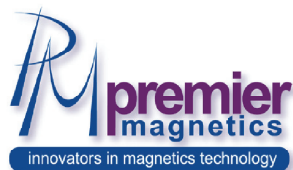
TYPE SIZE

	C1	C2	C3	C4	C5	C6
L (mm)	22.0	23.5	32.0	32.0	32.0	32.0
W (mm)	29.0	40.0	27.0	35.0	43.0	50.0
H (mm)	29.5	40.0	43.0	43.0	43.0	49.0



Premier Magnetics and Avnet Abacus
—Partnered Together to Provide Total Circuit Solutions
to Customers Utilizing Power Integrations ICs in their Power Supply Designs

www.avnet-abacus.eu/premier-magnetics



20381 Barents Sea Circle
Lake Forest, CA 92630
Tel: (949) 452-0511
FAX: (949) 452-0512
www.premiermag.com