

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

- * Designed for 10/100MB/s Transmission Over UTP-5 Cable, IEEE 802.3 100BASE-TX.
- * Designed for 350uHY Primary OCL with an 8mA bias.
- * Designed to Support all leading Fast Ethernet Chip Sets.
- * Provides the Cable Interface, Isolation & Common Mode Filtering required by the PMD Sublayer.
- * Through Hole SIP & Low Profile Surface Mount Packages.

NORMAL TEMP RANGE

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

PART NUMBER	INSERTION LOSS (dB Typ) 1 to 80MHz	RISE TIME (ns Typ) 10-90%	Differential to Common Mode Rejection (dB Typ)			Return Loss (dB Typ)			Crosstalk (dB Typ)		HI-POT (Vrms Min)
			1-30 MHz	30-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-60MHz	60-100MHz	
PM-8508	-1.0	2.5	-60	-50	-30	-18	-12	-10	n/a	n/a	1500
PM-8510	-1.0	2.5	-31	-31	-28	-18	-12	-10	n/a	n/a	1500
PM-8515	-1.0	2.5	-42	-37	-34	-18	-12	-10	-40	-38	1500
PM-8517	-1.0	2.5	-42	-37	-34	-18	-12	-10	-40	-38	1500
PM-8520	-1.1	2.5	-31	-31	-28	-18	-12	-10	-40	-38	1500
PM-8529	-1.1	2.5	-45	-40	-35	-16	-12	-10	-40	-35	1500
PM-8535	-1.2	2.5	-35	-30	-25	-12	-8	-5	-40	-38	3000
PM-8536	-1.2	2.5	-35	-30	-25	-12	-8	-5	-40	-38	3000
PM-8538	-1.2	2.5	-43	-37	-33	-12	-8	-5	-45	-38	3000
PM-8540	-1.2	2.5	-35	-30	-25	-12	-8	-5	-40	-38	5000
PM-8589	-1.0	2.5	-42	-38	-32	-22	-18	-12	-40	-40	1500

EXTENDED TEMP RANGE

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

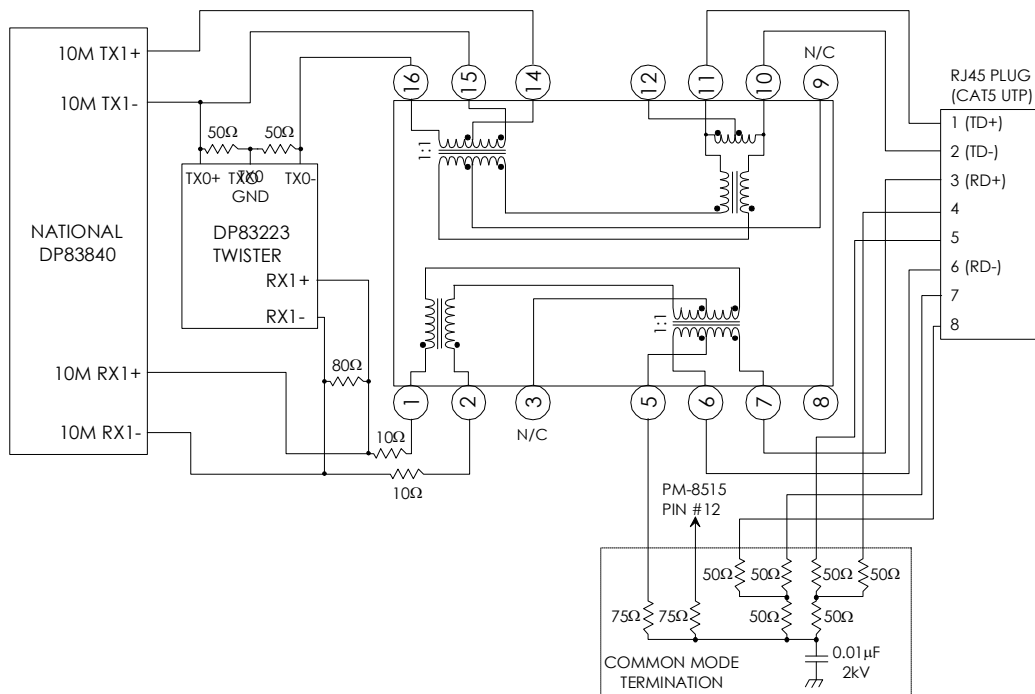
PART NUMBER	INSERTION LOSS (dB Typ) 1 to 80MHz	RISE TIME (ns Typ) 10-90%	Differential to Common Mode Rejection (dB Typ)			Return Loss (dB Typ)			Crosstalk (dB Typ)		HI-POT (Vrms Min)
			1-30 MHz	30-100 MHz	100-150 MHz	1-30 MHz	30-60 MHz	60-100 MHz	1-60MHz	60-100MHz	
PM-8540S	-1.2	2.5	-35	-30	-25	-12	-8	-5	-40	-38	5000
PM-8590	-1.0	2.5	-42	-37	-32	-16	-11	-10	-40	-35	1500
PM-8591	-1.0	2.5	-42	-37	-32	-16	-11	-10	-40	-35	1500
PM-8592	-1.0	2.5	-42	-37	-34	-18	-12	-10	-40	-38	1500

PART NUMBER	INSERTION LOSS (dB Max) 0.3-100MHz	Differential to Common Mode Rejection (dB Typ)			Return Loss (dB Typ)			Crosstalk (dB Typ)			HI-POT (Vrms Min)
		30 MHz	50 MHz	100 MHz	30 MHz	60 MHz	80 MHz	30 MHz	60 MHz	100 MHz	
PM-8595	-1.0	-42	-37	-32	-20	-14	-12	-45	-40	-35	1500

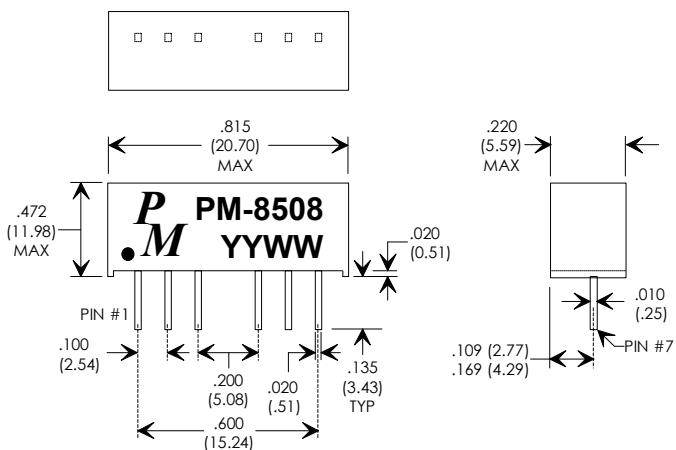
10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

TYPICAL PM-8515 & 8592 APPLICATION

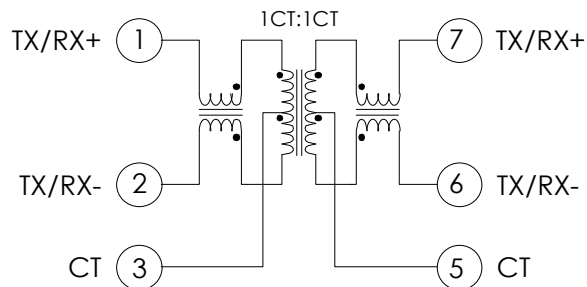
TYPICAL 10/100Mb/s ETHERNET NODE (10-BASE & 100BASE-TX)



PM-8508 MECHANICAL



PM-8508 SCHEMATIC



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

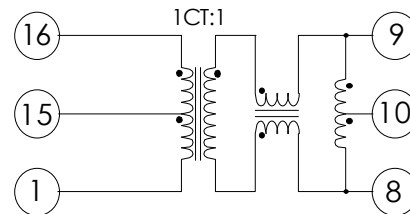
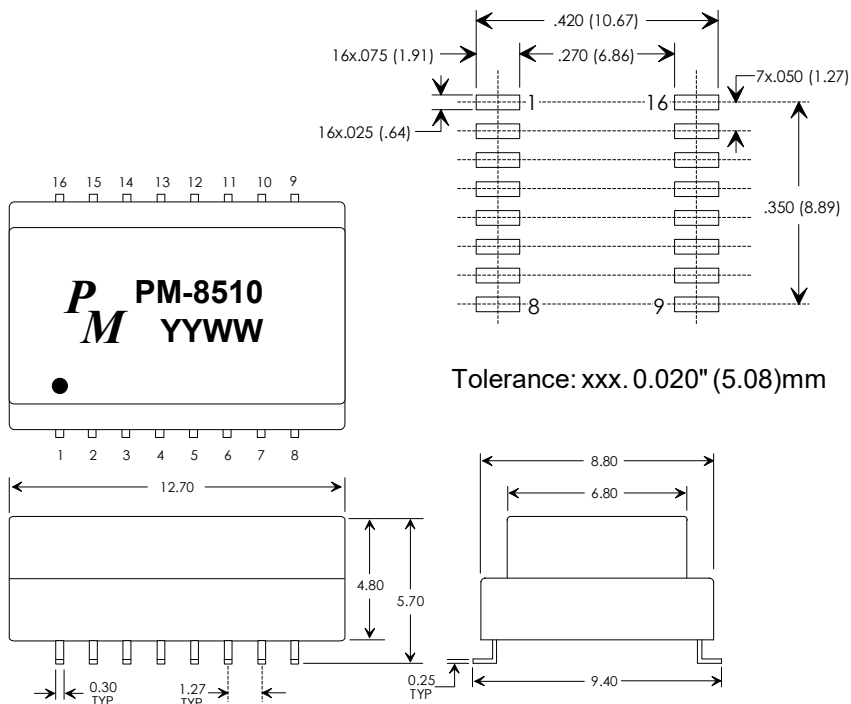
pm-85xx 07/2022

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8510 MECHANICAL

RECOMMENDED P.C.B. LAYOUT All Dimensions in inches (mm)

PM-8510 SCHEMATIC

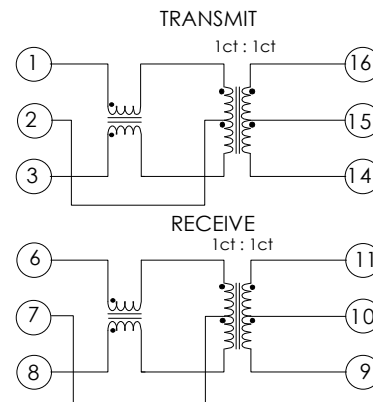
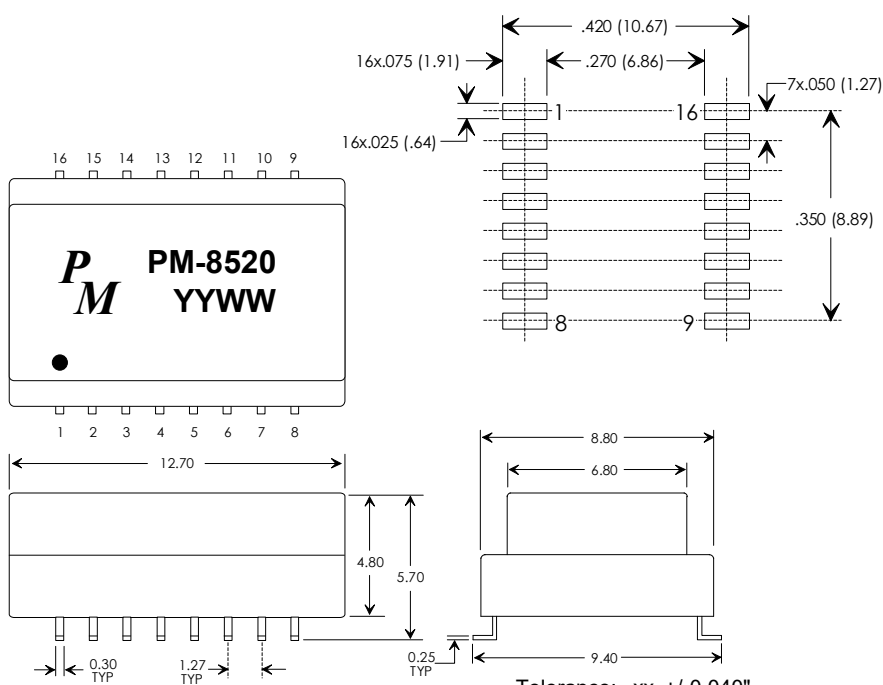


Tolerance: xxx. 0.020" (5.08)mm

PM-8520 MECHANICAL

RECOMMENDED P.C.B. LAYOUT All Dimensions in inches (mm)

PM-8520 SCHEMATIC



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

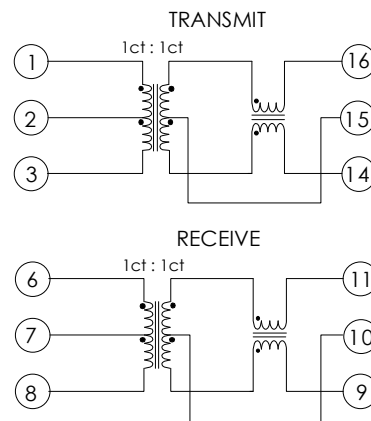
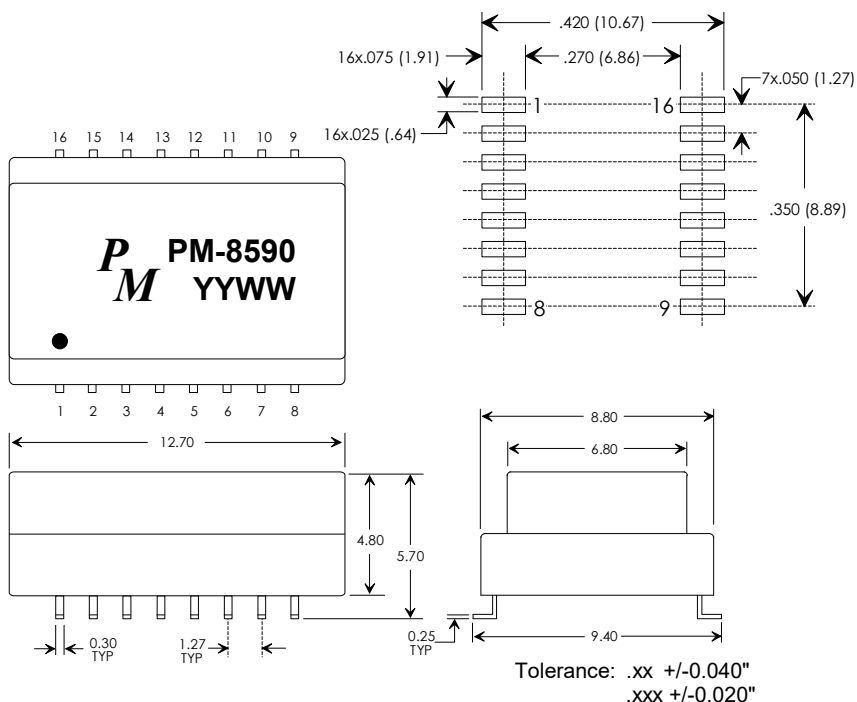
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10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8590 MECHANICAL

PM-8590 SCHEMATIC

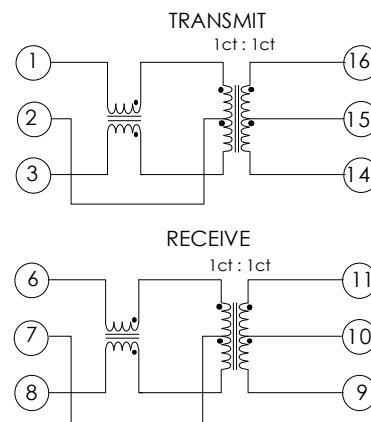
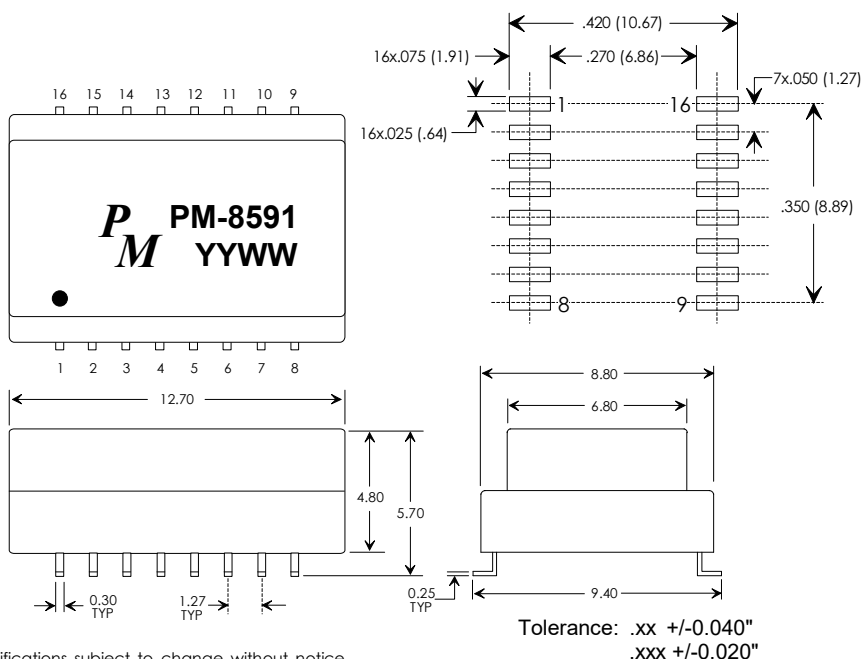
RECOMMENDED P.C.B. LAYOUT All Dimensions in inches (mm)



PM-8591 MECHANICAL

PM-8591 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT All Dimensions in inches (mm)



Specifications subject to change without notice.

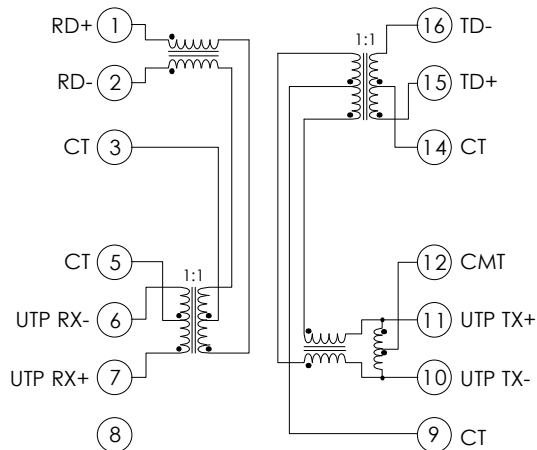
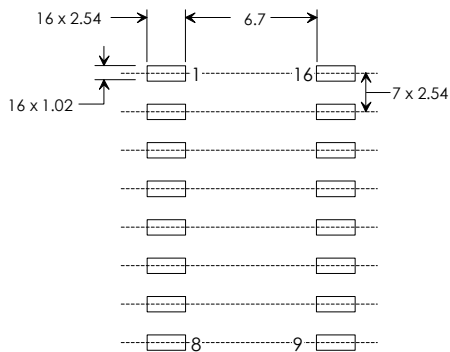
pm-85xx 07/2022

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8515 & 8592 MECHANICAL

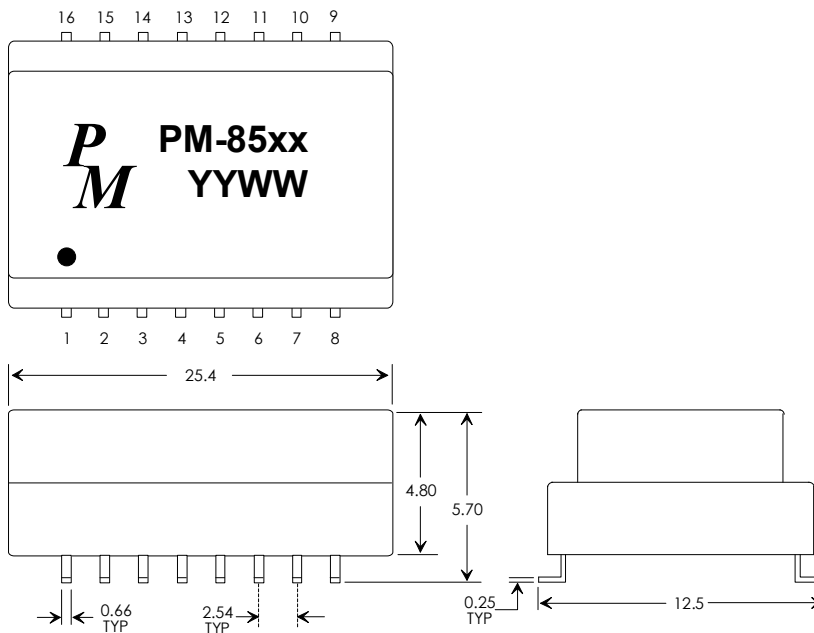
PM-8515 & 8592 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT
Dimensions in mm



PM-8515
100BASE-TX MAGNETICS

PHYSICAL DIMENSIONS IN mm



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

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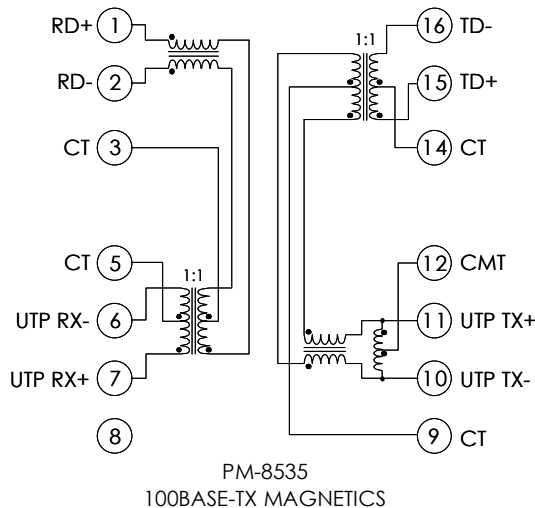
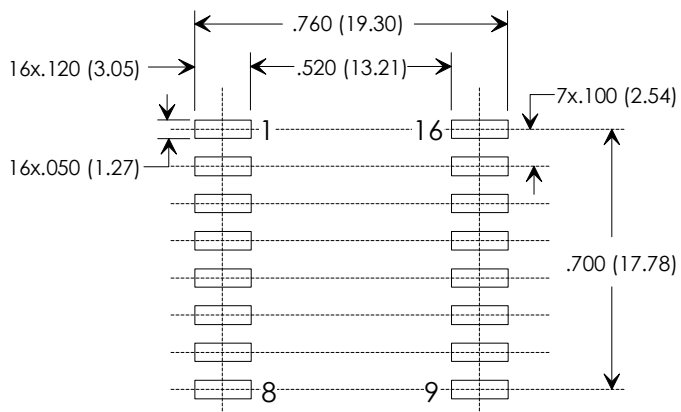
10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8535 MECHANICAL

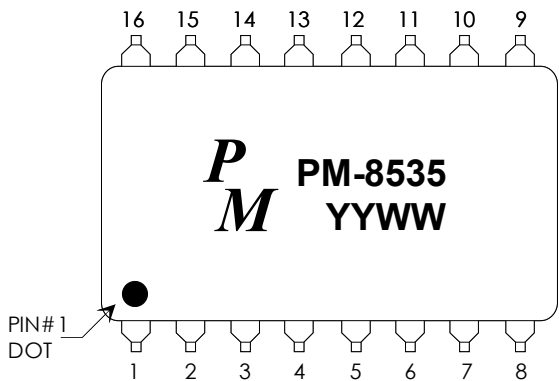
PM-8535 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT

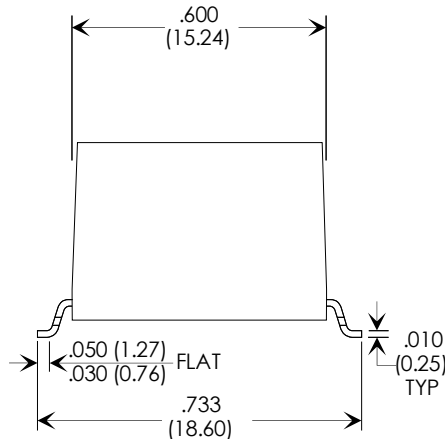
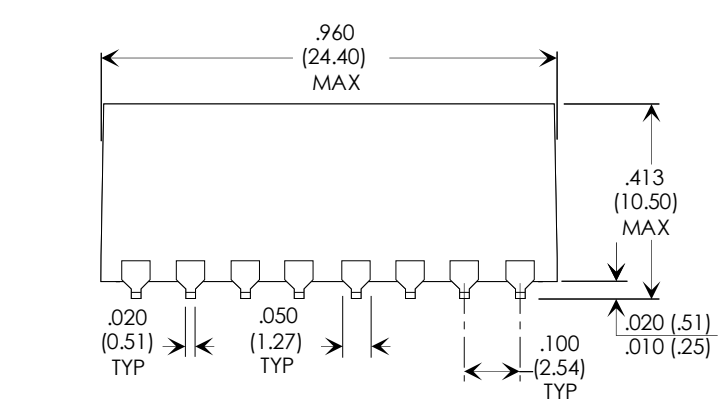
Dimensions in inches (mm)



PHYSICAL DIMENSIONS IN INCHES (mm)



NOTE1:
REINFORCED INSULATION SYSTEM (UL1950, CSA-950, IEC950):
A) ALL MATERIALS MEET "UL", "CSA" & "IEC" REQUIREMENTS
B) MEET UL 94-V0 FOR FLAMABILITY.
C) ALL MATERIALS ARE RATED 130°C OR BETTER.



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

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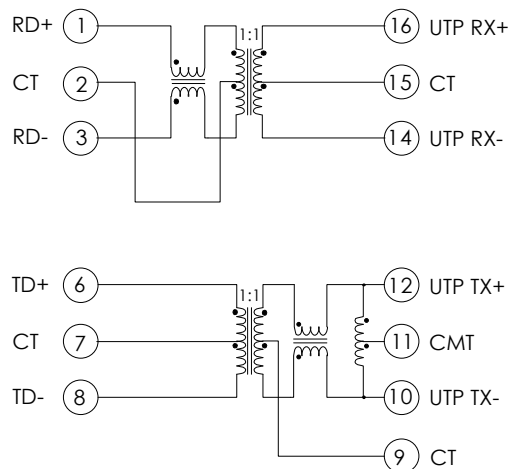
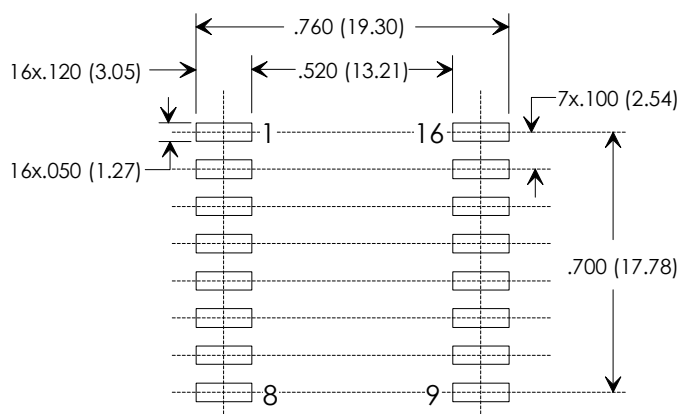
10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8536 MECHANICAL

PM-8536 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT

Dimensions in inches (mm)

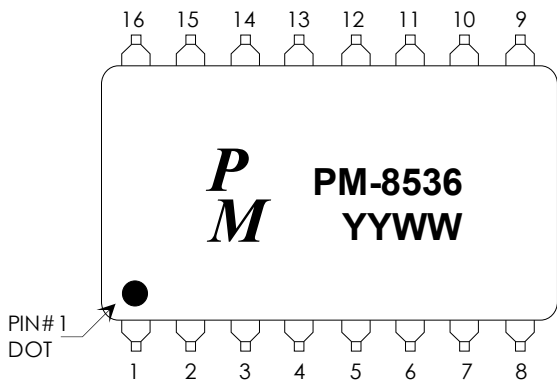


PM-8536
100BASE-TX MAGNETICS

M PM-8536
YYWW

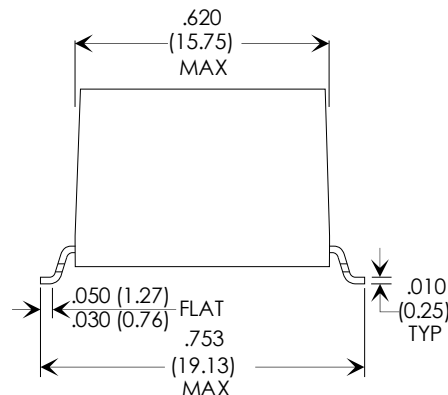
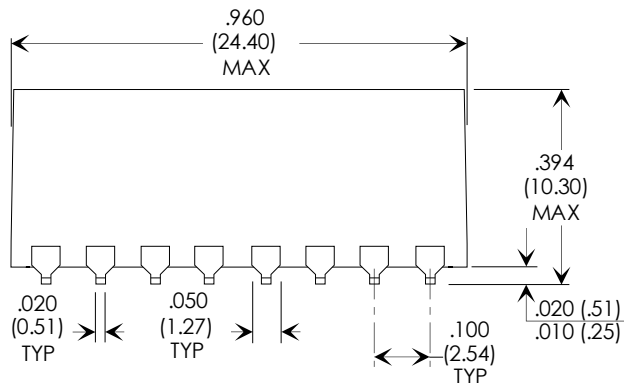
P

PHYSICAL DIMENSIONS IN INCHES (mm)



NOTE1:

- REINFORCED INSULATION SYSTEM (UL1950, CSA-950, IEC950):**
 A) ALL MATERIALS MEET "UL", "CSA" & "IEC" REQUIREMENTS
 B) MEET UL 94-VO FOR FLAMABILITY.
 C) ALL MATERIALS ARE RATED 130°C OR BETTER.



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

pm-85xx 07/2022

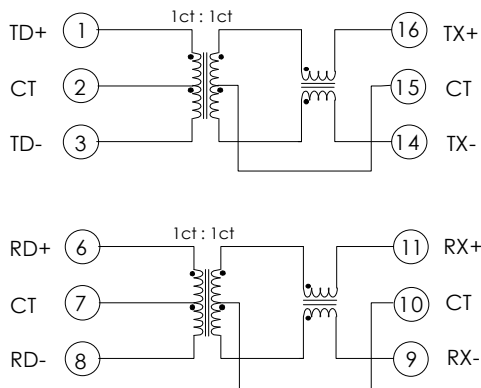
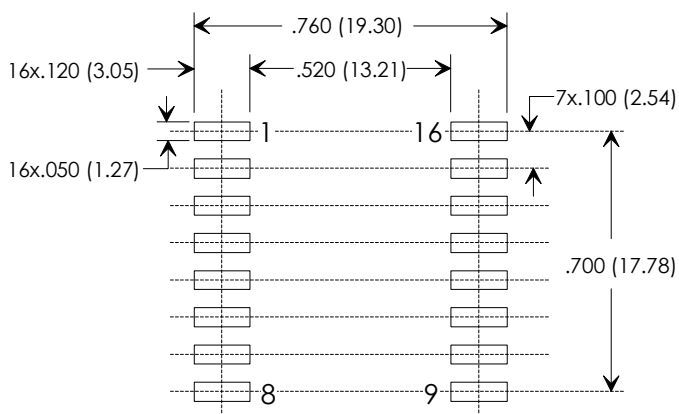
10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8538 / 8540

PM-8538 / 8540

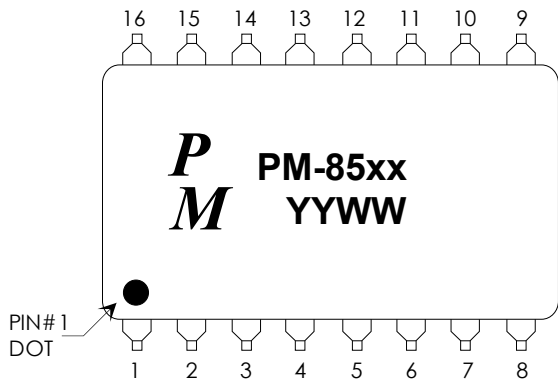
RECOMMENDED P.C.B. LAYOUT

Dimensions in inches (mm)

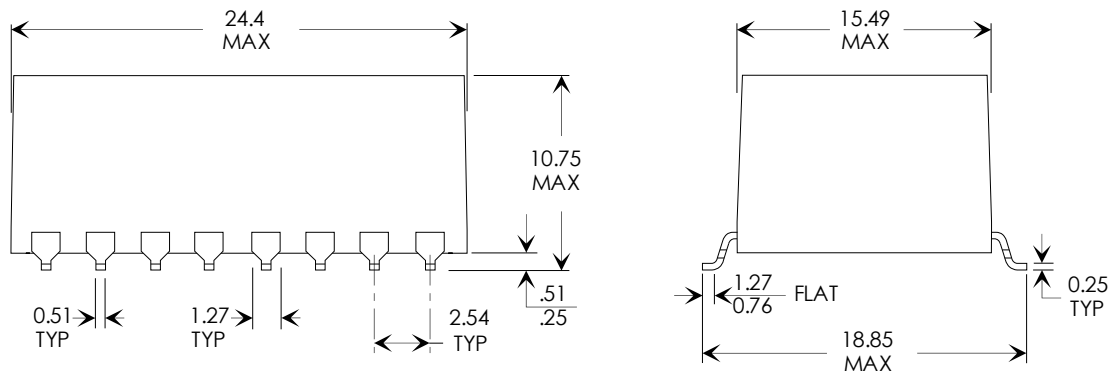


PM-8538
100BASE-TX MAGNETICS

PHYSICAL DIMENSIONS IN INCHES (mm)



NOTE1:
REINFORCED INSULATION SYSTEM (UL1950, CSA-950, IEC950):
A) ALL MATERIALS MEET "UL", "CSA" & "IEC" REQUIREMENTS
B) MEET UL 94-VO FOR FLAMABILITY.
C) ALL MATERIALS ARE RATED 130°C OR BETTER.



Tolerance: ± 0.25 mm,
unless otherwise specified

Specifications subject to change without notice.

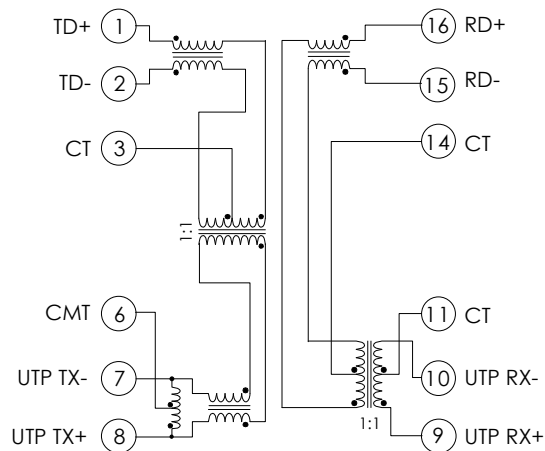
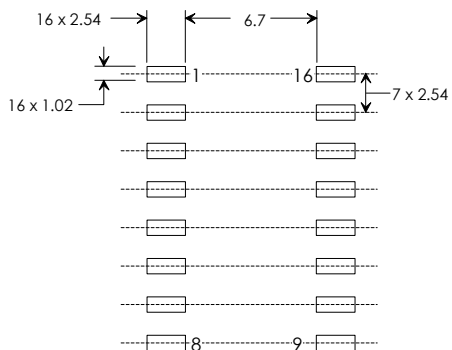
pm-85xx 07/2022

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8517 MECHANICAL

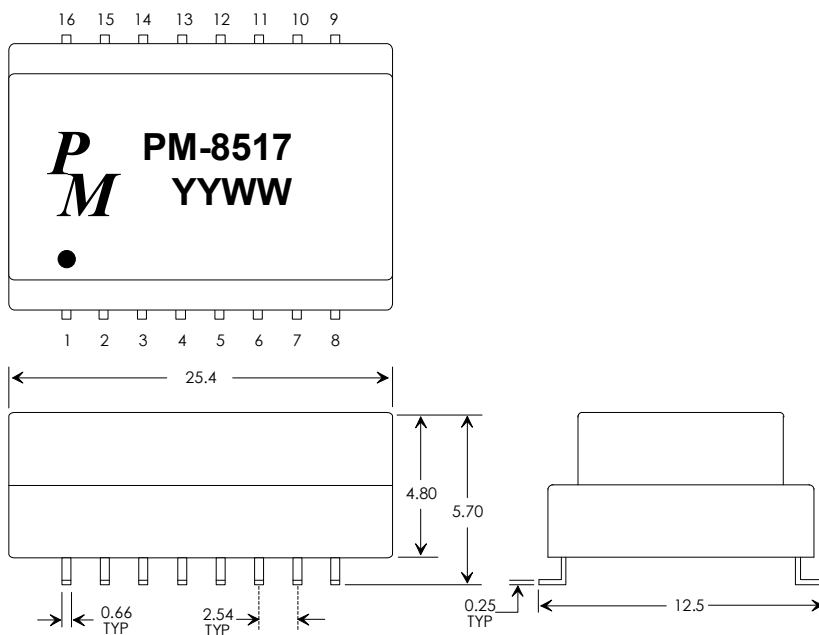
PM-8517 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT Dimensions in mm



PM-8517
100BASE-TX MAGNETICS

PHYSICAL DIMENSIONS IN mm



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

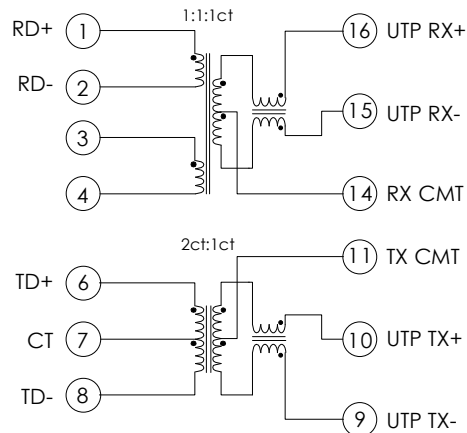
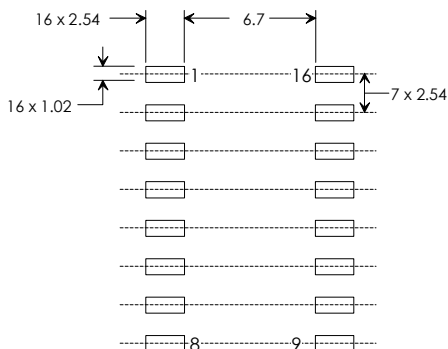
pm-85xx 07/2022

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8529 MECHANICAL

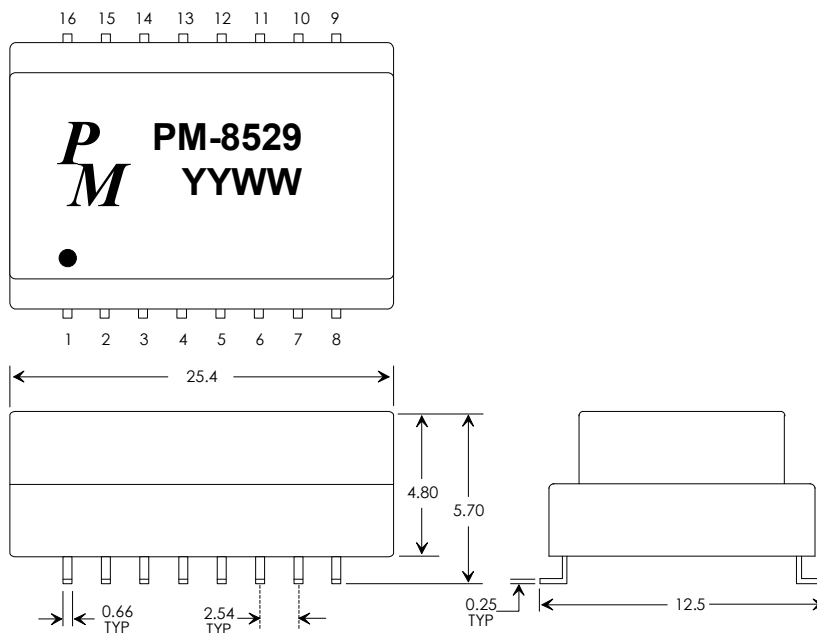
PM-8529 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT
Dimensions in mm



PM-8529
10/100BASE-TX MAGNETICS

PHYSICAL DIMENSIONS IN mm



REF IC:
MICRO LINEAR ML6692
SEEQ80220

Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

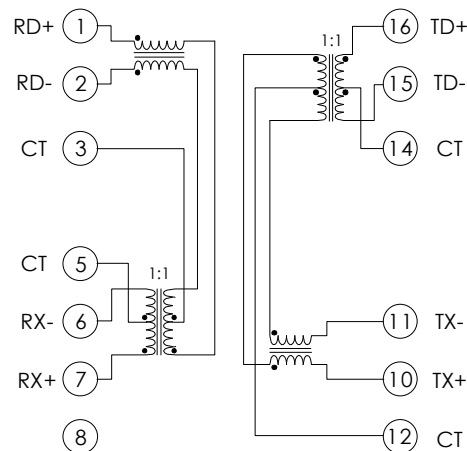
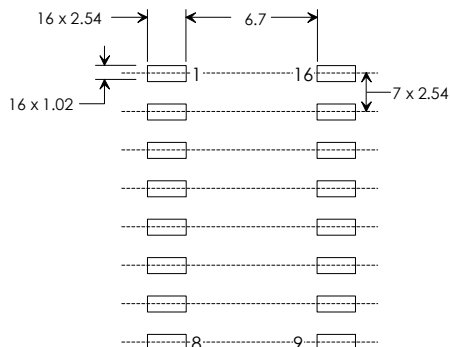
pm-85xx 07/2022

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

PM-8589 MECHANICAL

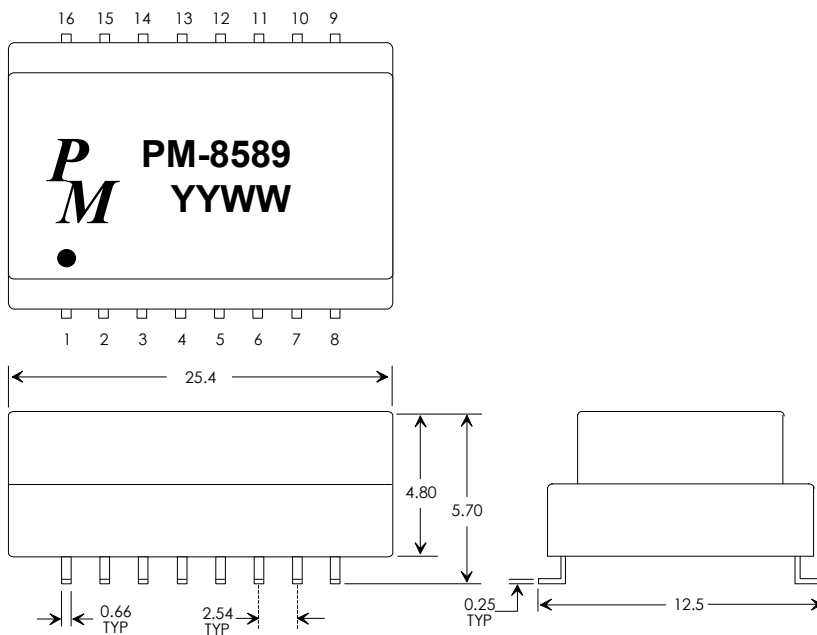
PM-8589 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT
Dimensions in mm



PM-8589
100BASE-TX MAGNETICS

PHYSICAL DIMENSIONS IN mm



Tolerance: .xx +/-0.040"
.xxx +/-0.020"

Specifications subject to change without notice.

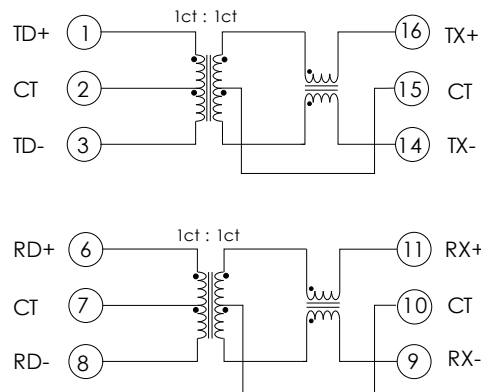
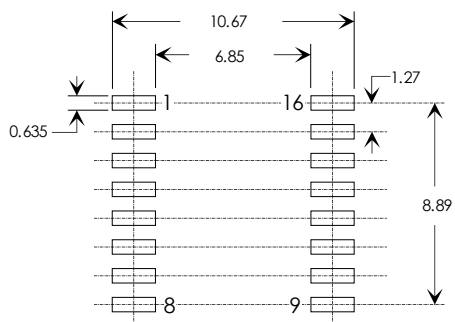
pm-85xx 07/2022

10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

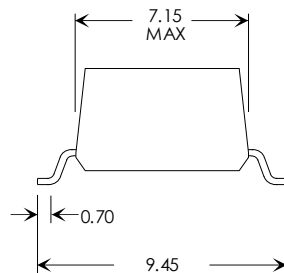
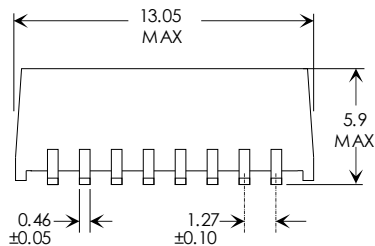
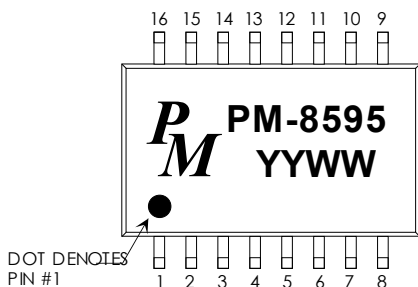
PM-8595 MECHANICAL

PM-8595 SCHEMATIC

RECOMMENDED P.C.B. LAYOUT
Dimensions in mm



PHYSICAL DIMENSIONS IN mm



Tolerance: ± 0.25 mm,
unless otherwise specified

Specifications subject to change without notice.

pm-85xx 07/2022



10/100 Base-TX ISOLATION TRANSFORMERS WITH FILTERS

CROSS REFERENCE LISTING

<u>PREMIER PART#</u>	<u>X-REF NAME & PART#</u>
PM-8508	PULSE PE-68508
PM-8510	PULSE PE-68510
PM-8515	PULSE PE-68515, 68515L, H1012
PM-8517	PULSE PE-68517, 68517L, H1019
PM-8520	HALO TG110-S050N2
PM-8529	VALOR ST6129
PM-8589	PULSE H1089
PM-8590	PULSE H1188
PM-8591	PULSE H1198
PM-8595	PULSE HX1188NL