

SMALL OUTLINE 10/100BASE-T ISOLATION TRANSFORMERS

FEATURES:

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

GENERAL SPECIFICATIONS:

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

NORMAL TEMP RANGE

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

PART NUMBER	TURNS RATIO (PRI:SEC ±5%)		PRIMARY OCL (mH Min.)	PRI / SEC L_L (mH Max.)	PRI-SEC Cw/w (pf Max.)	PRI DCR (W Max.)	Hi-Pot (Vrms)	CMC	Package/ Schematic
	RCV	XMIT							
PM-1001	1ct:1ct	1ct:1ct	150	0.17	20	0.30	2000	NO	G1/C
PM-1002	1:1	1:1.41	150	0.30	20	0.40	2000	NO	G1/B
PM-1003	1ct:1ct	1ct:1ct	200	0.40	20	0.40	2000	NO	G1/C
PM-1004	1ct:1ct	1ct:1.41ct	150	0.40	20	0.40	2000	YES	G1/D
PM-1005	1ct:1ct	1ct:1.41ct	150	0.30	20	0.40	2000	NO	G1/C
PM-1006	1ct:1ct	1ct:1ct	150	0.40	20	0.80	2000	YES	G1/D
PM-1006H	1ct:1ct	1ct:1ct	150	0.40	20	0.80	2200	YES	G1/D
PM-1007	1ct:2ct	1ct:1ct	150	0.40	20	0.80	2000	YES	G1/D
PM-1008	1ct:1ct	1ct:2ct	112	0.30	8/12	0.80	1500	YES	G1/E
PM-1011	1ct:1ct	1ct:2.50ct	150	0.30	20	0.40	2000	YES	G1/D
PM-1013	1ct:1ct	1ct:1.ct	150	0.30	20	0.40	1500	YES	G1/H
PM-1015	1ct:1ct	1ct:2ct	140	0.40	15	0.30	2000	YES	G1/D

EXTENDED TEMP RANGE

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

PART NUMBER	TURNS RATIO (PRI:SEC ±5%)		PRIMARY OCL (mH Min.)	PRI / SEC L_L (mH Max.)	PRI-SEC Cw/w (pf Max.)	PRI DCR (W Max.)	Hi-Pot (Vrms)	CMC	Package/ Schematic
	RCV	XMIT							
PM-1009	1ct:1ct	1ct:2.50ct	180	0.40	20	0.40	2000	NO	G1/C
PM-1010	1ct:1ct	1ct:1.41ct	180	0.40	15	0.40	2000	YES	G1/D
PM-1012	1ct:2ct	1ct:1ct	note 3	0.30	20	1.0	1500	YES	G1/E
PM-1014	1ct:1ct	1ct:1.41ct	150	0.40	30	0.50	2000	NO	G1/C
PM-1016	1ct:1ct	1ct:1ct	180	0.40	20	0.40	2000	YES	G1/D
PM-1016A ⁴									
PM-1020 ²	1:1	1:1	200	0.30	25	.030	2000	YES	A8/G
PM-3008 ¹	1ct:1ct	1ct:2ct	150	0.60	18	0.40/0.90	3KV IEC	YES	H1/E
PM-3009 ¹	1ct:1ct	1ct:1ct	150	0.50	20	0.90	3KV IEC	YES	H1/D

NOTES:

- 1) 3KV ISOLATION VERSIONS ARE BUILT TO UL1950, CSA950 & IEC950 REINFORCED INSULATION REQUIREMENTS
- 2) PM-1020 IS A QUAD DESIGN WITH COMMON MODE CHOKES.
- 3) OCL 1-3 = 50 mH Min., 9-11 = 200 mH Min.
- 4) Rev. of PM-1016 with epoxy material cover the coil.

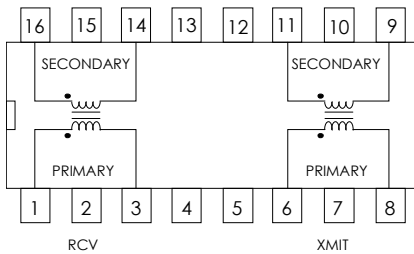
Specifications subject to change without notice.

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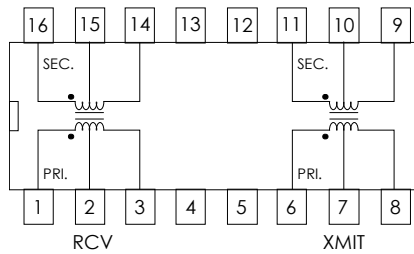
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SCHEMATICS

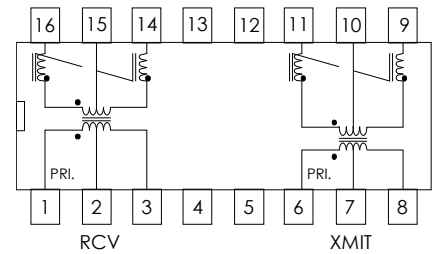
SCHEMATIC DIAGRAM "B"



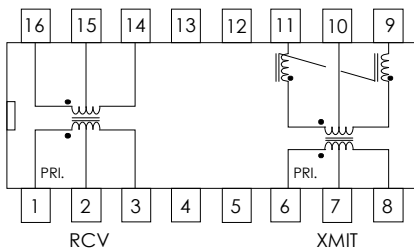
SCHEMATIC DIAGRAM "C"



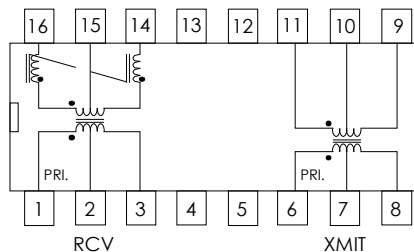
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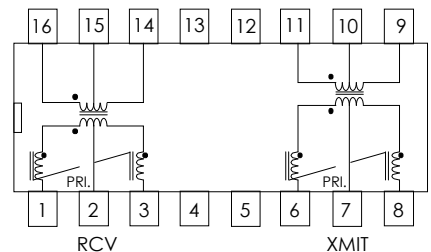
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SCHEMATIC DIAGRAM "F"



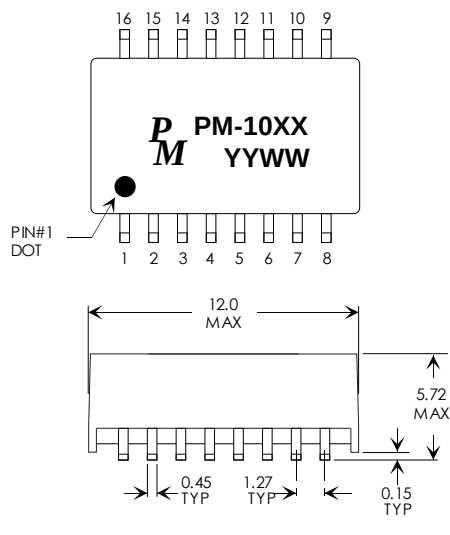
SCHEMATIC DIAGRAM "H"



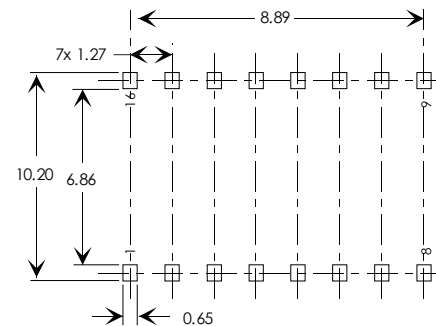
DIMENSIONS & PCB LAYOUT

G1 PACKAGE

PHYSICAL DIMENSIONS DIMENSIONS IN INCHES (mm)



SUGGESTED PCB LAYOUT



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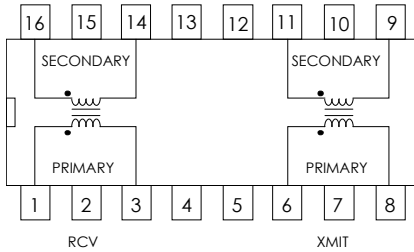
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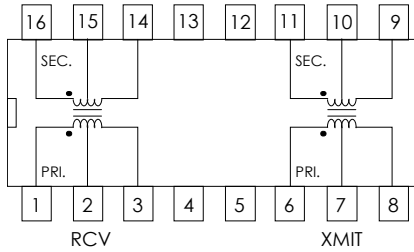
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SCHEMATICS

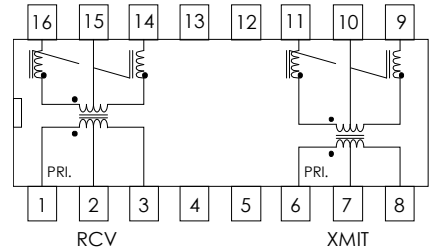
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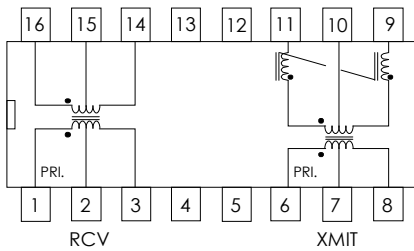
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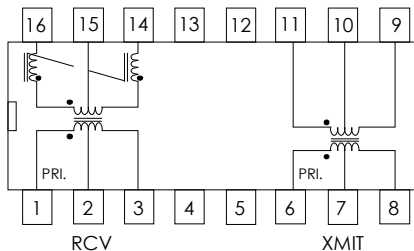
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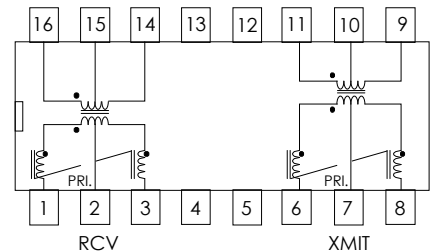
SCHEMATIC DIAGRAM "E"



SCHEMATIC DIAGRAM "F"



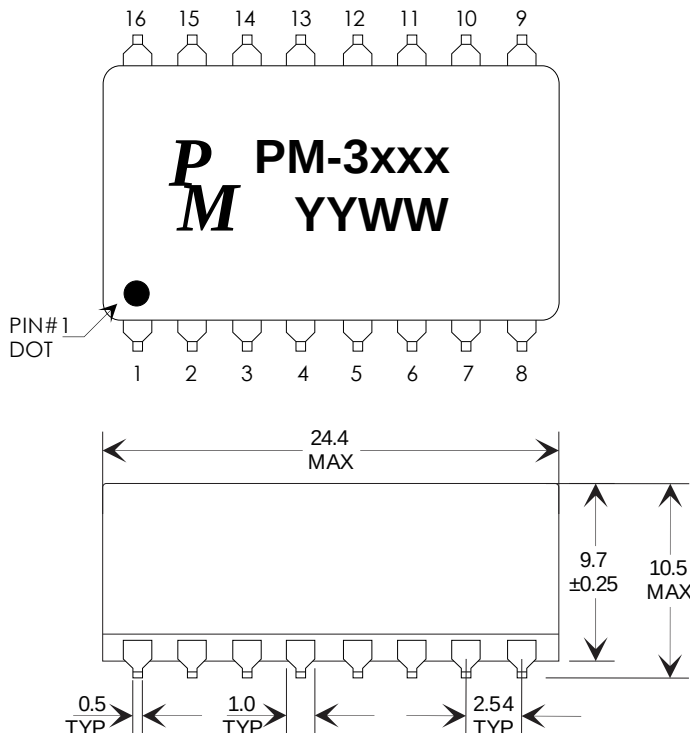
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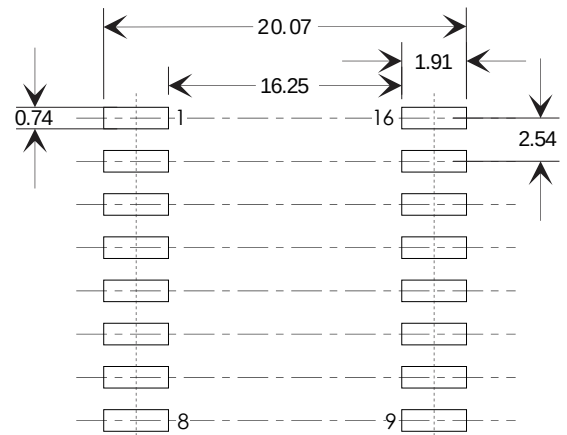
DIMENSIONS & PCB LAYOUT

H1 PACKAGE

PHYSICAL DIMENSIONS DIMENSIONS IN mm



SUGGESTED PCB LAYOUT



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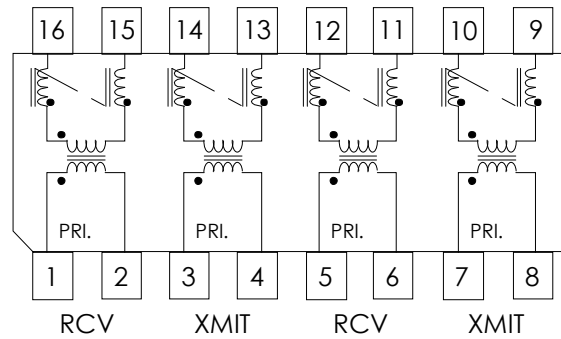
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SMALL OUTLINE 10/100BASE-T ISOLATION TRANSFORMERS

SCHEMATIC

A8 PACKAGE

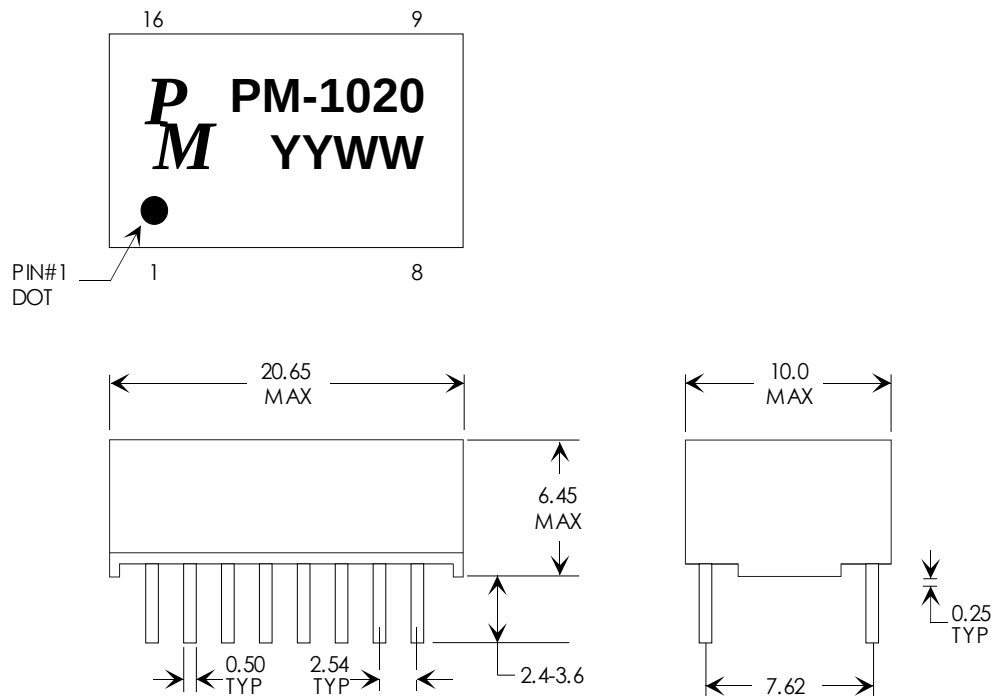
SCHEMATIC DIAGRAM "G"



DIMENSIONS & PCB LAYOUT

A8 PACKAGE

PHYSICAL DIMENSIONS DIMENSIONS IN INCHES (mm)



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