FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

FEATURES:

❶ Designed to meet FCC Part 68
❷ Designed for V.29, V.32, V.32 bis & V.fast apps.
❸ Low Profile Through Hole Packages
❹ 1500 or 3000Vrms Isolation Voltage Available

GENERAL SPECIFICATIONS:

Longitudinal Balance:
60 to 1000 Hz ..... 60 dB Min.
1000 to 4000 Hz ..... 40 dB Min.
Turns Ratio (Pri:Sec) ..... 1:1 ± 2%

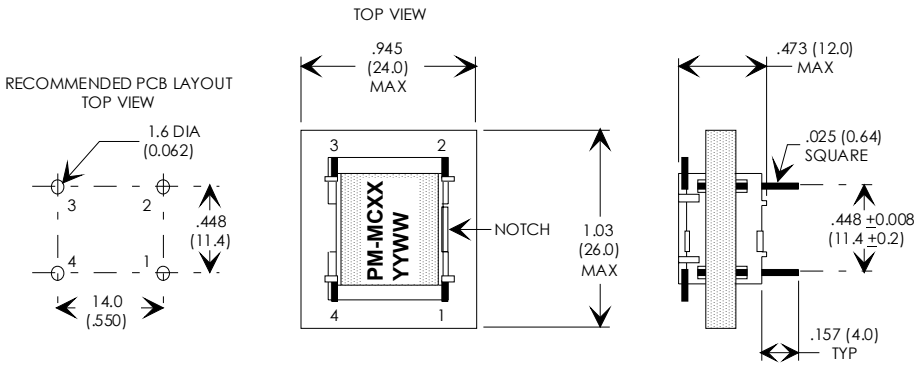
* DESIGNED TO MEET SUPPLEMENTARY INSULATION REQUIREMENTS FOR A PRIMARY CIRCUIT AS DEFINED BY IEC-950, EN60950, UL1950/CSA950

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

PART NUMBER	Modem Speed up to	Primary DC Current (mA Max)	DCR (Ω ±10%) Pri	DCR (Ω ±10%) Sec	Pri = 600 Ω with Load of (Ω)	Ins. Loss @ 1KHz (dB Max.)	Harm Dist @ 300Hz (% Typ.)	Ret Loss @ 1800Hz (dB Min.)	Frequency Response (±dB) 300-600Hz	Frequency Response (±dB) 600-3500	HI-POT Vrms
PM-MC01	V.29	100	108	120	470	2.5	0.5	13.0	2.5	1.0	1500
PM-MC04	V.29	100	108	120	470	2.5	0.5	13.0	2.5	1.0	3000
PM-MC02	V.32 bis	0	108	120	374	2.5	0.5	25.0	0.25	0.25	1500
PM-MC03	V.34	0	150	150	301	3.0	0.5	25.0	0.25	0.25	1500
PM-MC05*	V.34, 90	0	164	168	301	3.2	0.5	20.0	0.25	0.25	1875

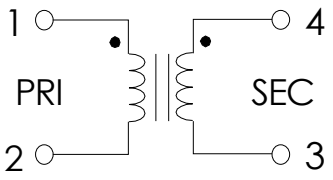
PACKAGE

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)



SCHEMATIC

SCHEMATIC DIAGRAM



Specifications subject to change without notice.

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FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

FEATURES:

1. Designed to meet FCC Part 68
2. Designed for V.29, V.32, V.32 bis & V.fast apps.
3. For 56.6kbps technologies
4. Developed for PCMCIA Type II Card

GENERAL SPECIFICATIONS:

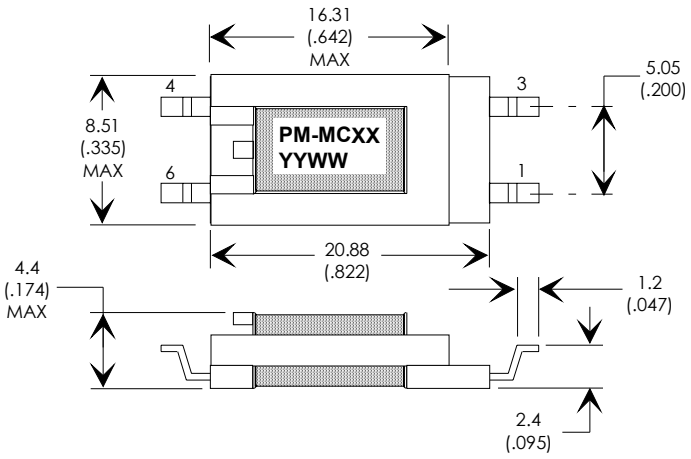
Longitudinal Balance:
200 to 1000 Hz ..... 40 dB Min.
1000 to 4000 Hz ..... 60 dB Min.
Turns Ratio (Pri:Sec) ..... 1:1 ± 2%

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

PART NUMBER	Modem Speed up to	Primary DC Current (mA Max)	DCR (Ω±10%) Pri	DCR (Ω±10%) Sec	Pri = 600 Ω with Load of (Ω)	Ins. Loss @ 1KHz (dB Max.)	Harm Dist @ 600Hz (db MAX)	Ret Loss @ 1800Hz (dB Min.)	Frequency Response (±dB) 200Hz - 4000Hz	HI-POT Vrms
PM-MC10	V.90	0	155	145	297	3.5	-82	14.0	0.20	1650

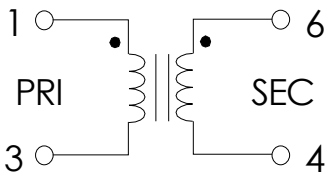
PACKAGE

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)



SCHEMATIC

SCHEMATIC DIAGRAM



Specifications subject to change without notice.

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FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

FEATURES:

❶ Designed to meet FCC Part 68
❷ Designed for V.29, V.32, V.32 bis & V.fast apps.
❸ Low Profile SMD & Through Hole Packages
❹ 1250 & 1500Vrms Isolation Voltage

GENERAL SPECIFICATIONS:

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

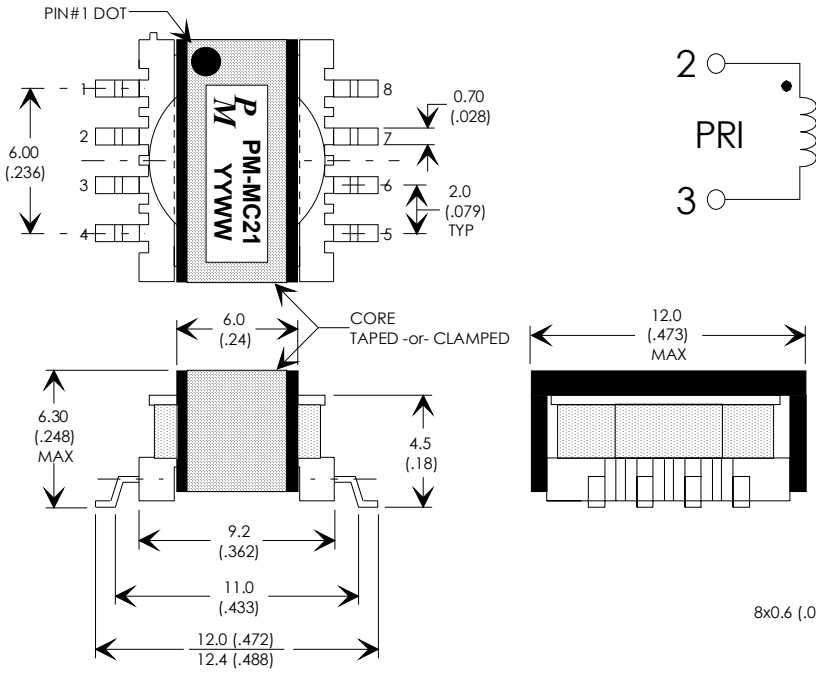
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

PART NUMBER	Package/ Schematic	Primary DC Current (mA Max)	DCR (Ω MAX) Pri	DCR (Ω MAX) Sec	Pri = 600 Ω with Load of (Ω)	Ins. Loss @ 1KHz (dB Max.)	Harm Dist @ 300Hz (% Typ.)	Ret Loss @ 1000Hz (dB Min.)	Frequency Response (±dB) 300-600Hz	Frequency Response (±dB) 600-3500	HI-POT Vrms
PM-MC21	ER11-SMD	0	67	85	487	1.50	0.5	15.0	0.50	0.50	1500
PM-MC26*	EP7-THRU	0	68	85	475	1.25	0.5	26.0	0.25	0.25	1250
PM-MC27*	EP7-SMD	0	68	85	475	1.25	0.5	26.0	0.25	0.25	1250

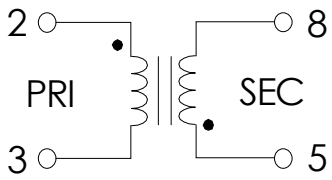
NOTE: * PRIMARY INDUCTANCE = 700mH MINIMUM

PACKAGE ER11-SMD | **SCHEMATIC ER11-SMD**

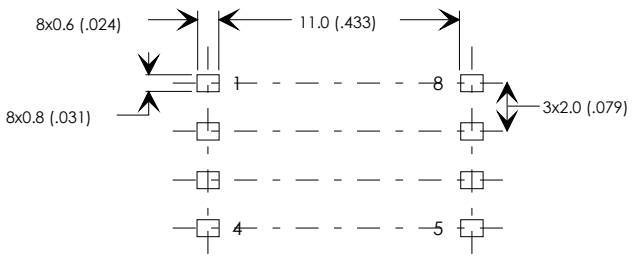
PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)



SCHEMATIC DIAGRAM



RECOMMENDED PCB LAYOUT



Specifications subject to change without notice.

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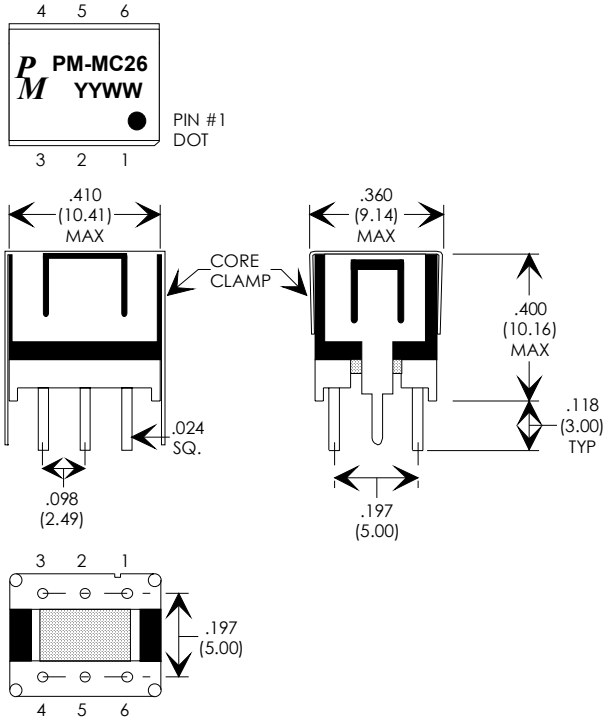
FCC PART68 VOICE/DATA COUPLING TRANSFORMERS

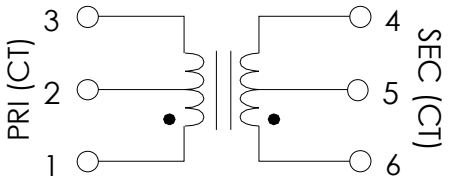
PACKAGE EP7-THRU

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)



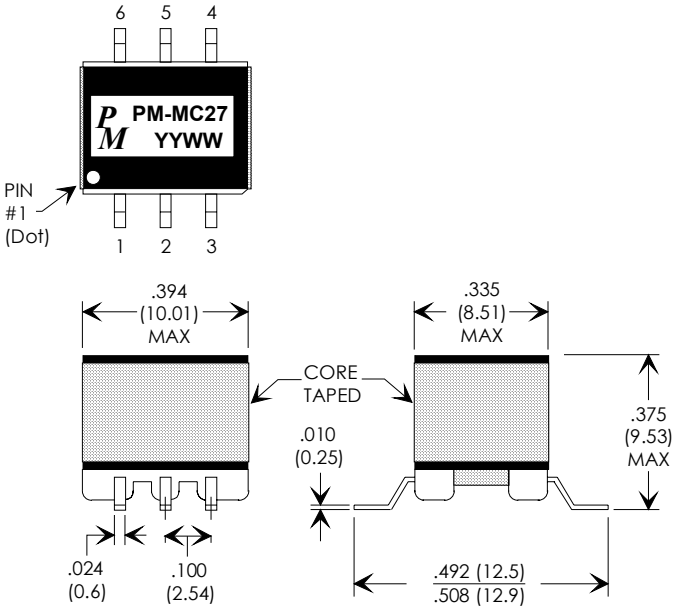
SCHEMATIC EP7-THRU

SCHEMATIC DIAGRAM



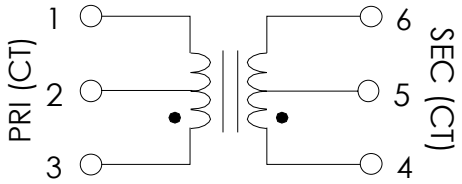
PACKAGE EP7-SMD

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)

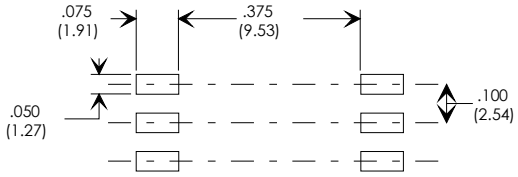


SCHEMATIC EP7-SMD

SCHEMATIC DIAGRAM



RECOMMENDED PCB LAYOUT



Specifications subject to change without notice.

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HI-ISOLATION VOICE/DATA COUPLING TRANSFORMER

FEATURES:

❶ Designed to meet BS6305 circuit requirements
❷ Encapsulated Through Hole Package
❸ 3000Vrms Isolation Voltage
❹ Turns Ratio (Pri:Sec) ..... 1:1 ± 2%

GENERAL SPECIFICATIONS:

Turns Ratio (Pri:Sec) ..... 1:1 ± 2%
OCL Inductance:
Lp @ 200Hz, 10mV, 0mAdc ... 2.5H Min.
Parallel AC Resistance ..... 4 - 12K Ohms

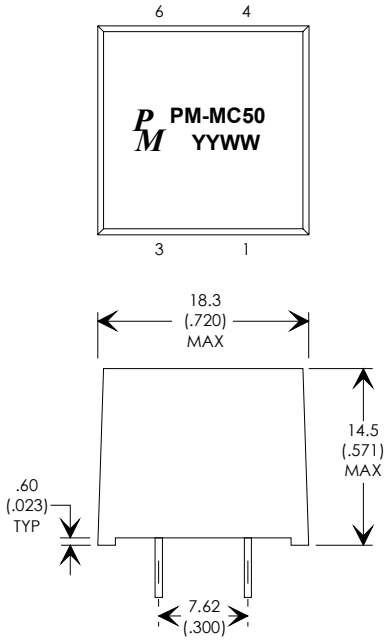
ELECTRICAL SPECIFICATIONS AT 25°C - OPERATING TEMPERATURE RANGE 0°C TO 70°C

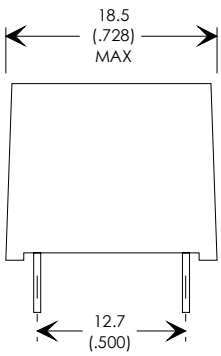
PART NUMBER	Package/ Schematic	Primary DC Current (mA Max)	DCR (Ω±15%) Pri	DCR (Ω±15%) Sec	Pri /Sec Impedance w/load=470Ω 1KHz (Ω)	Ins. Loss @ 2KHz (dB Max.)	Harm Dist @ 400Hz (dB Max.)	Ret Loss .30 - 4 KHz (dB Min.)	Frequency Response (±dB) 200-600Hz	Frequency Response (±dB) 600-4000	HI-POT Vrms
PM-MC50	DIP-4	0	70.4	70.4	600/600	1.50	-87	24.0	0.40	0.40	3000

PACKAGE DIP-4

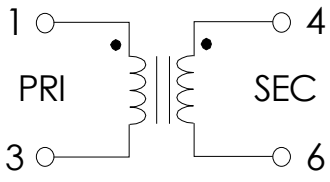
SCHEMATIC DIP-4

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)





SCHEMATIC DIAGRAM



PART IS 100% REVERSABLE
I.E. IT CAN BE INSERTED INTO THE PCB EITHER WAY

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V.90 LOW DISTORTION VOICE/DATA COUPLING TRANSFORMER

FEATURES:

❶ COMPATIBLE WITH V.90 TECHNOLOGY
❷ Low Profile Through Hole Package
❸ 1500 Vrms Isolation Voltage

GENERAL SPECIFICATIONS:

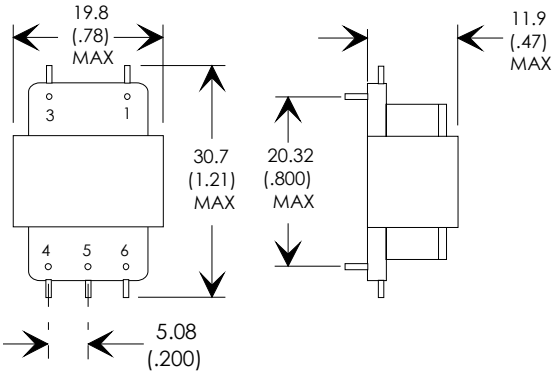
Longitudinal Balance:
200 to 1000 Hz ..... 60 dB Min.
1000 to 4000 Hz ..... 40 dB Min.
Turns Ratio (Pri:Sec) ..... 1:1 ± 2%

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

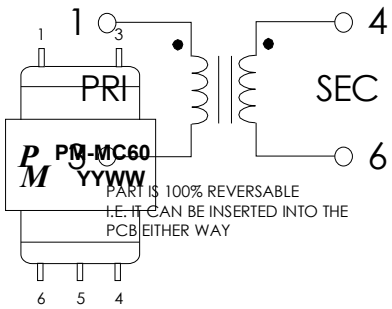
PART NUMBER	Package/ Schematic	Primary DC Current (mA Max)	DCR (Ω ±15%) Pri	DCR (Ω ±15%) Sec	Pri /Sec Impedance 1KHz (Ω)	Ins. Loss @ 1KHz (dB)	Harm Dist @ 600Hz,-10dBm (dB Typ/Max)	Ret Loss .30 - 3 KHz (dB Min.)	Freq Response (±dB) 200Hz-4000Hz	HI-POT Vrms
PM-MC60	DIP-4	0	108	120	600/374	2 ±.25	-91/-82	15	±.25	1500

PACKAGE DIP-4 **SCHEMATIC DIP-4**

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)



SCHEMATIC DIAGRAM



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AUDIO
COUPLING TRANSFORMER

FEATURES:

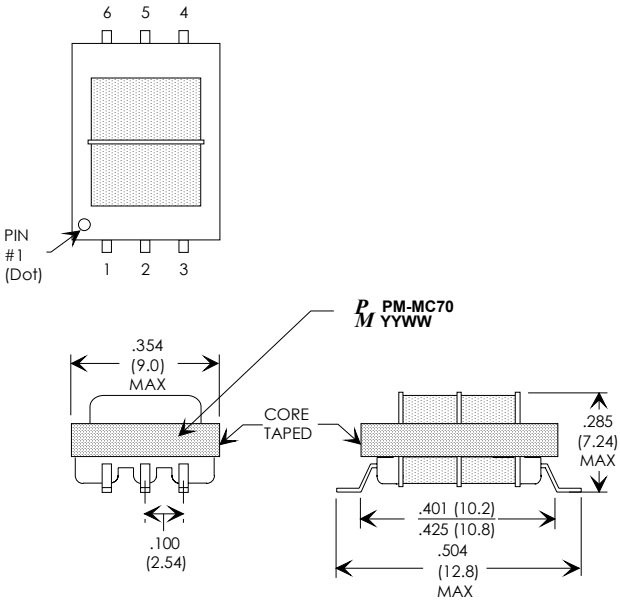
❶ Low Profile SMD Package
❷ 1500 Vrms Isolation Voltage
❸ Turns Ratio (Pri:Sec) 1:1 ± 2%

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

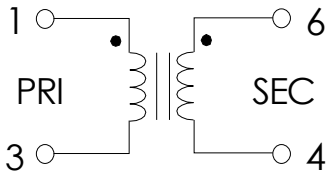
PART NUMBER	Package/ Schematic	INDUCTANCE (H MIN)	D.C. RESISTANC Pri /Sec (Ω)		PRIMARY Impedance 600Ω Sec' Load	HI-POT Vrms
PM-MC 70	SMD 6	0.75	65.0	65.0	600	1500

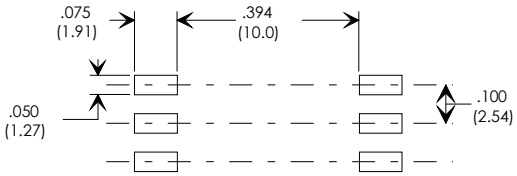
PACKAGE **SCHEMATIC**

PHYSICAL DIMENSIONS .... DIMENSIONS IN mm (inches)



SCHEMATIC DIAGRAM





Specifications subject to change without notice.

pmmc 11/04

POCKET/LAPTOP MODEM TRANSFORMERS

FEATURES:

❶ Designed to meet FCC Part 68
❷ Designed for V.29, V.32, V.32 bis & V.34 bis.
❸ Small size/ Low cost

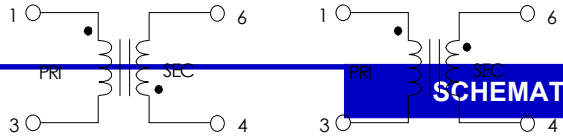
GENERAL SPECIFICATIONS:

Longitudinal Balance:
60 to 1000 Hz ..... 60 dB Min.
1000 to 4000 Hz -102, 104, 105..... 60 dB Min.
1000 to 4000 Hz ..... 40 dB Min.
Turns Ratio (Pri:Sec) ..... 1:1 ± 2%
Turns Ratio (Pri:Sec) -101 & 107.....0.92:1 ± 2%

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

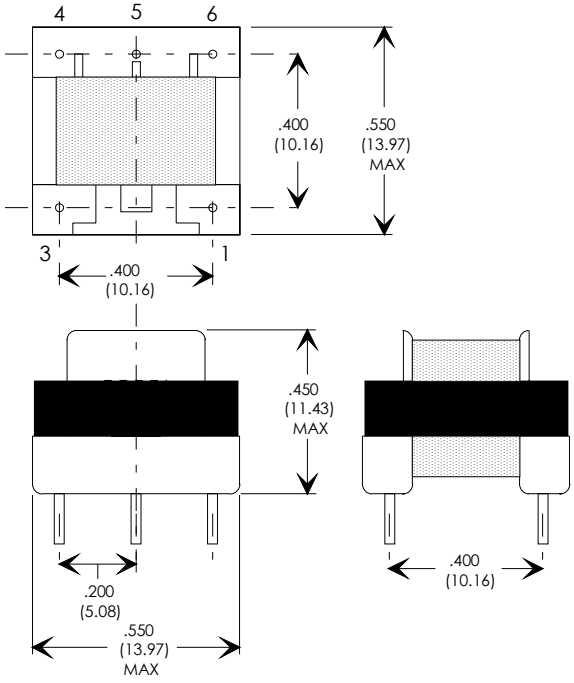
PART NUMBER	Modem Speed up to	Primary DC I	DCR (Ω±10%) Pri	DCR (Ω±10%) Sec	Pri = 600 Ω with Load of (Ω)	Ins. Loss @ 1KHz (dB Max.)	Harm Dist @ 600Hz (db MAX)	Ret Loss @ 300Hz (dB Min.)	Freq Response (±dB) 300Hz - 3500Hz	HI-POT Vrms	Schematic
PM-MC101	V.29	0	46.5	67.6	600	1.25	-68	21	0.25	1250	B
PM-MC102	V.29	0	52	59	600	1.50	-68	23	0.50	3750	A
PM-MC103	V.32bis	0	80	87	442	2.0	-76	21	0.25	1250	B
PM-MC104	V.32bis	0	86	91	442	2.0	-76	22	0.50	3750	A
PM-MC105	V.34bis	0	152	151	348	3.25	-83.6	20	0.50	3750	A
PM-MC106	V.34bis	0	135	143	324	3.0	-82	35	0.25	1250	B
PM-MC107	V.32	0	52	75	600	1.15	-71	22	0.20	1250	B
PM-MC108	V.32bis	0	105	105	402	2.25	-76	26	0.13	1250	B

SCHEMATIC



SCHEMATIC "A" SCHEMATIC "B"

PACKAGE



Specifications subject to change without notice.

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VOICE/DATA COUPLING TRANSFORMERS

CROSS REFERENCE LISTING

PREMIER PART#	X-REF NAME & PART#
PM-MC01	MIDCOM 671-8001
PM-MC03	MIDCOM 671-8039,671-8079
PM-MC05	MIDCOM 82098
PM-MC26	MIDCOM 671-5932
PM-MC27	MIDCOM 671-8243
PM-MC50	CRITCHLEY CWC 9000
PM-MC60	MIDCOM 671-8262
PM-MC10	MIDCOM 671-8481
PM-MC102	MIDCOM 671-8240

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