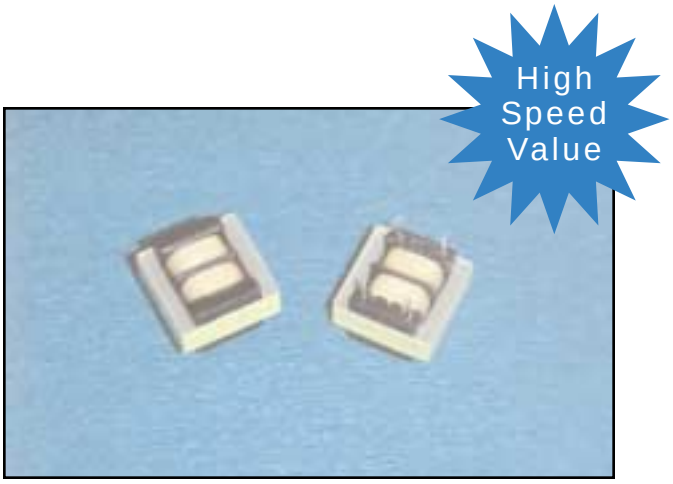
Analog Telephony / Modem Couplers



DESCRIPTION

The REMtech MIT-4235 is a “Dry” Modem Isolation Transformer suitable for up to V.90 (56 kbps) desktop PC, embedded/socket, router, server, cable/satellite/set-top box and other analog modems compliant with worldwide saftey norms.

MIT-4235 offers IEC60950 Supplementary safety for lower cost compared to EMIT-5020L. Other performance characteristics of MIT-4235 are the same as EMIT-5020L.

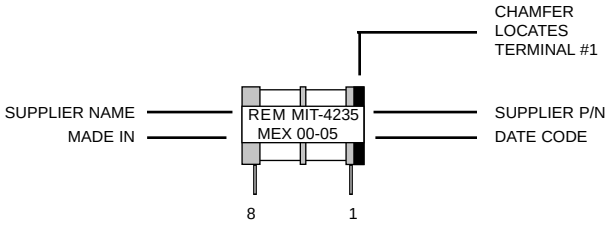
FEATURES

- Suitable for modem speeds up to V.90 (56 kbps).
- Total Harmonic Distortion rated -96 dB typ. @ 600 Hz, -10 dBm and -80 dB typ.@150 Hz, -3dBm.
- Insertion Loss rated 3.00 dB typ. @ 2000 Hz.
- Complies with IEC60950 Supplementary safety norms.
- Matches 600 Ohm and complex impedance telephone lines.
- Uses minimal external components for impedance matching.
- Very small PCB footprint (16.5 mm x 16.5 mm).
- Very-Low-Profile (10.5 mm).
- Industry-standard pin configuration.

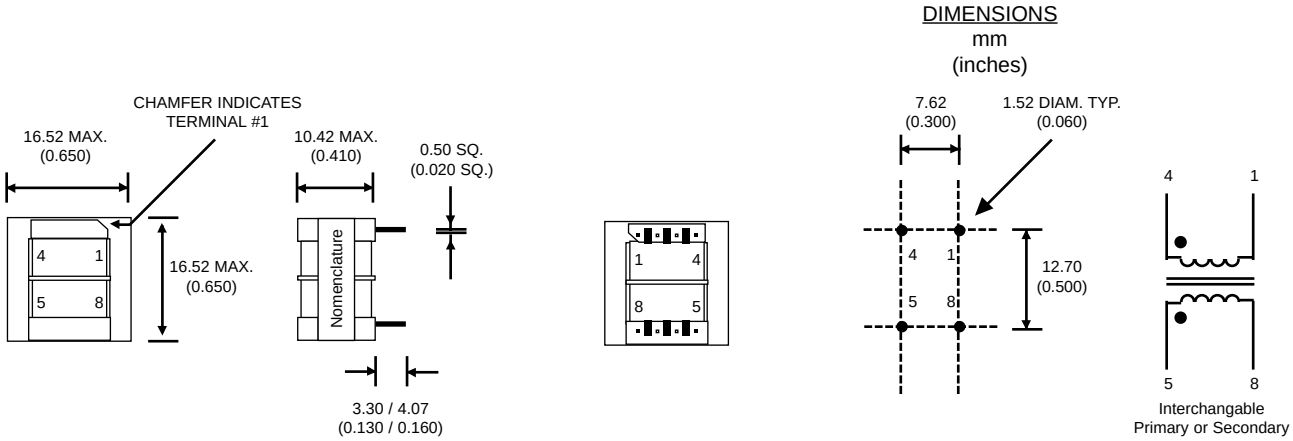
PRODUCT COMPLIANCE

UL / C-UL recognized file number:	E171120
BSI certificate number(s):	Pending
BABT certificate of recognition:	Pending

NOMENCLATURE (Fig. 1)



MECHANICAL DIMENSIONS (Fig. 2)



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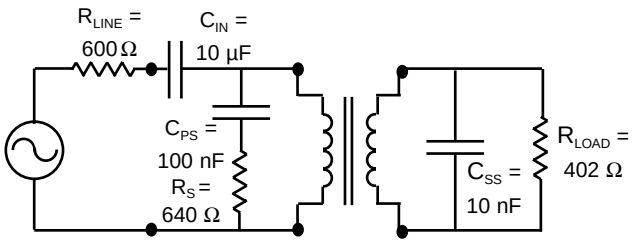
ELECTRICAL PERFORMANCE SPECIFICATIONS

Electrical Performance Specifications (T_A = 25 °C unless otherwise specified)

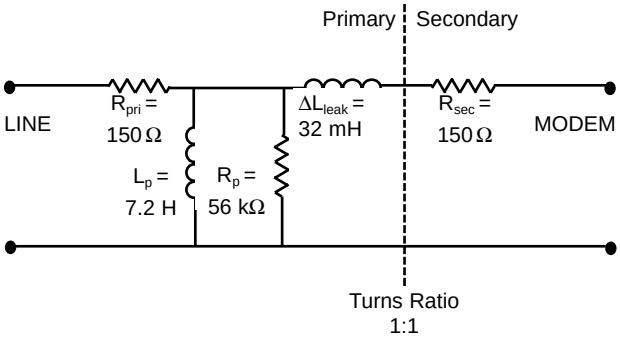
PARAMETERS	CONDITIONS	MIN	TYP	MAX	UNITS
Impedance	Reflected on Primary With Load on Secondary	- -	600 560	- -	Ohms Ohms
Total Harmonic Distortion	@ 600 Hz, -10 dBm @ 150 Hz, -3dBm	-	-74	-86 -68	dB dB
Insertion Loss	Per IEEE method; @ 2000 Hz	-	1.50	3.50	dB
Return Loss	200 Hz - 4000 Hz Per 600 Ohm Match (Fig. 3) Per CTR21 Pan-Euro Match (Fig. 10)	 14 14	 - -	 - -	 dB dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 Min. HiPot Voltage Duration Trip Leakage Current	1500 1875 2 -	- - - -	- - - 200	Vrms Vrms Sec µA
Frequency Response	200 Hz - 4000 Hz	-	±0.60	-	dB
Longitudinal Balance	Per FCC part 68.310 60 Hz - 1000 Hz 1000 Hz - 4000 Hz	 60 40	 - -	 - -	 dB dB
DC Resistance @ 20°C, ±10%	Primary Winding Secondary Winding	- -	67 67	- -	Ohms Ohms
DC Current in Primary	-	-	0	-	mADC
Turns Ratio	Primary to Secondary; ±2%	-	1:1	-	Turns
Operating Temperature	-	-40	-	105	°C
Storage Temperature	-	-40	-	125	°C
Soldering Temperature	10 Sec. Max.	-	-	260	°C

600 OHM MATCH (Fig. 3)



SCHEMATIC EQUIVALENT (Fig. 4)

(Typical Transformer Model @ 1 V, 1 kHz)



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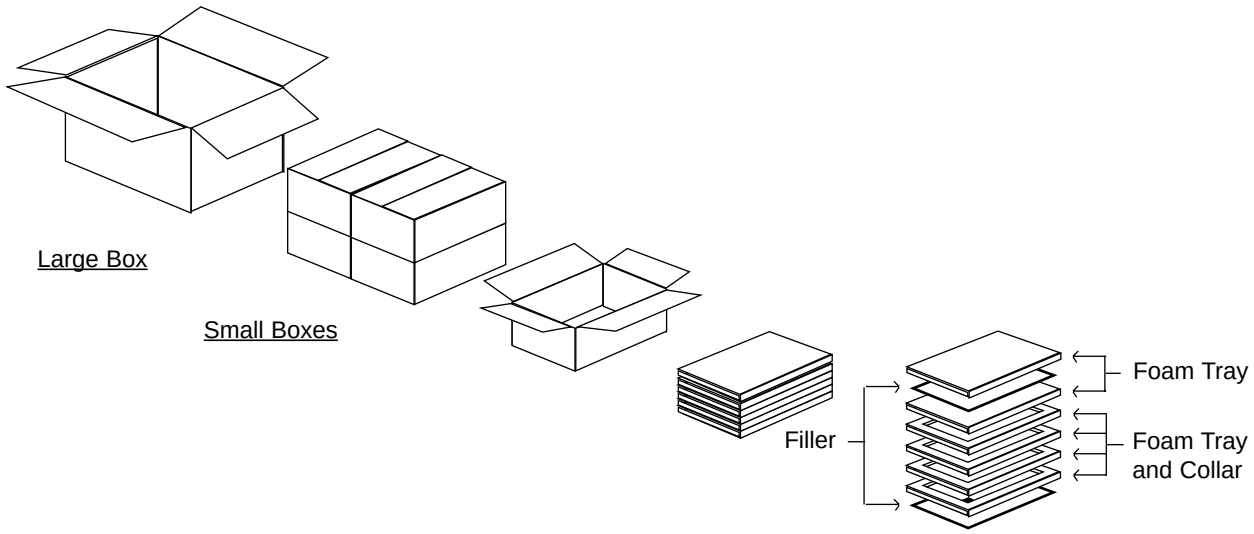
STANDARD PACKAGING (Fig. 9)

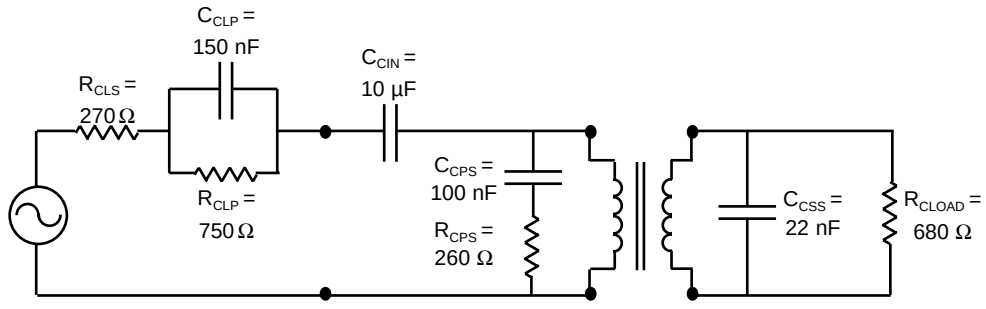


Packaging

Material	Contents	#Transformers
Large Box	4 Small Boxes	2640
Small Box	4 Trays	660
Tray	165 Transformers	165
---	Transformer	1

PAN-EUROPEAN CTR21 MATCH (Fig. 10)

(Application circuits available on request for specific national match requirements.)



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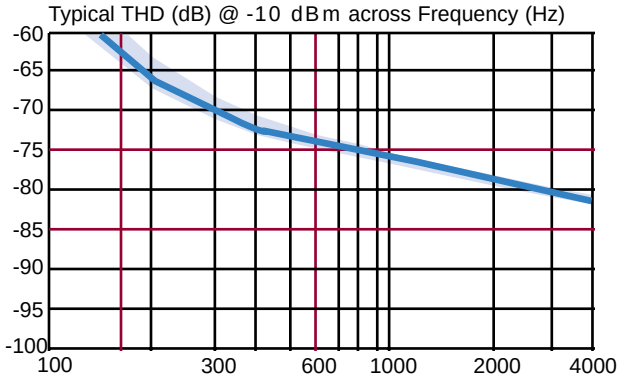
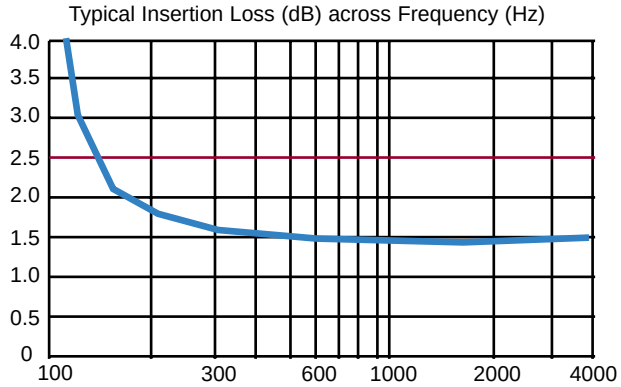
PERFORMANCE DATA

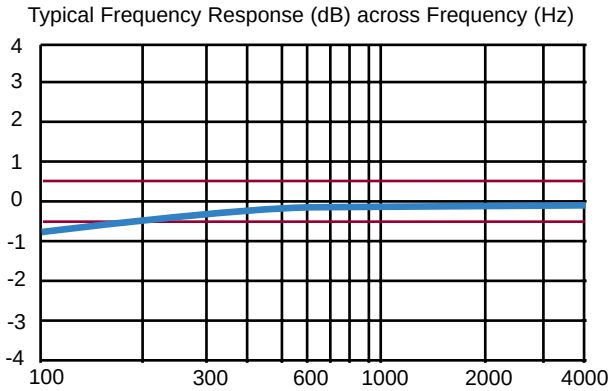
TOTAL HARMONIC DISTORTION (Fig. 5)



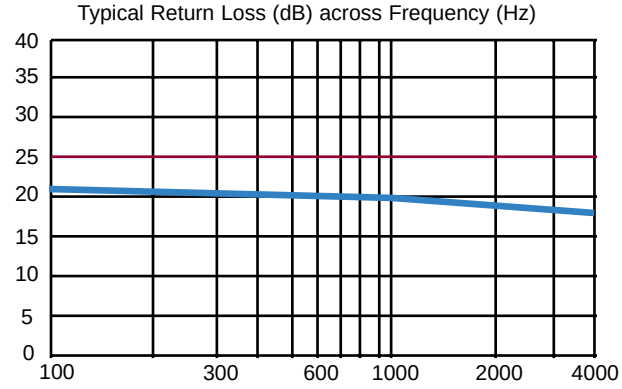
INSERTION LOSS (Fig. 6)

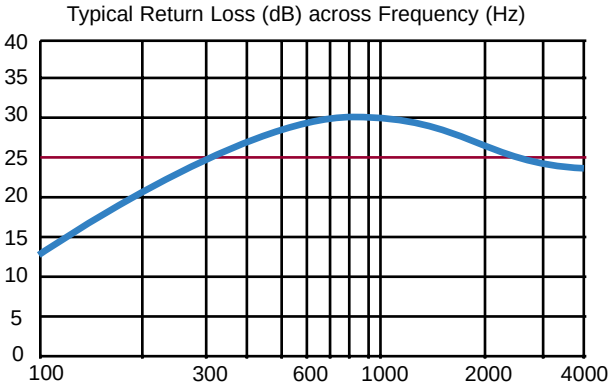


FREQUENCY RESPONSE (Fig. 7)



RETURN LOSS (Fig. 8)





(Measured per CTR21 Match depicted in Fig. 10)

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