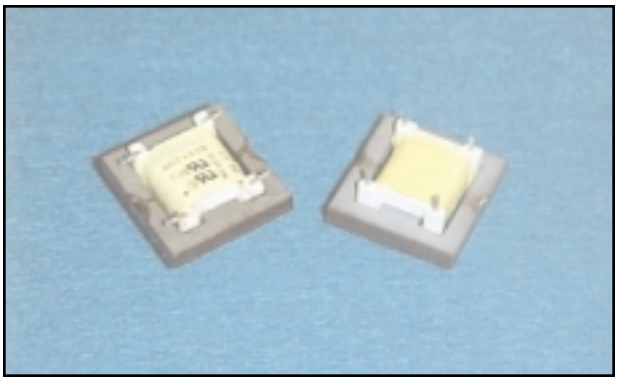


DESCRIPTION

The REMtech Magnetics MIT-115 is a low-cost “Wet” Modem Isolation Transformer suitable for up to V.32 (9.6 kbps) analog modem applications compliant with Domestic safety norms.

MIT-115 applications include fax machines, DBS / Set-top boxes, computer telephony, POS, security, and electric metering. Higher performance than MIT-101.

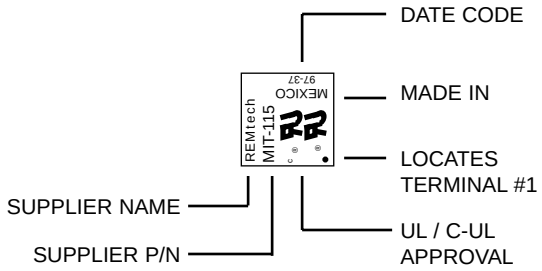
FEATURES

- Suitable for modem speeds up to V.32 (9.6 kbps).
- Cost-effective “Wet” coupler construction reduces DAA components.
- Total Harmonic Distortion rated -60 dB typ. @ 600 Hz, -10 dBm.
- Insertion Loss rated 2.00 dB typ. @ 1000 Hz.
- Complies with UL1459 safety norms.
- Reflects 600 Ohms on Primary with 470 Ohms Secondary Load.
- Small PCB footprint (24.0 mm x 23.0 mm).
- Low-Profile (12.0 mm).
- Industry-standard pin configuration.

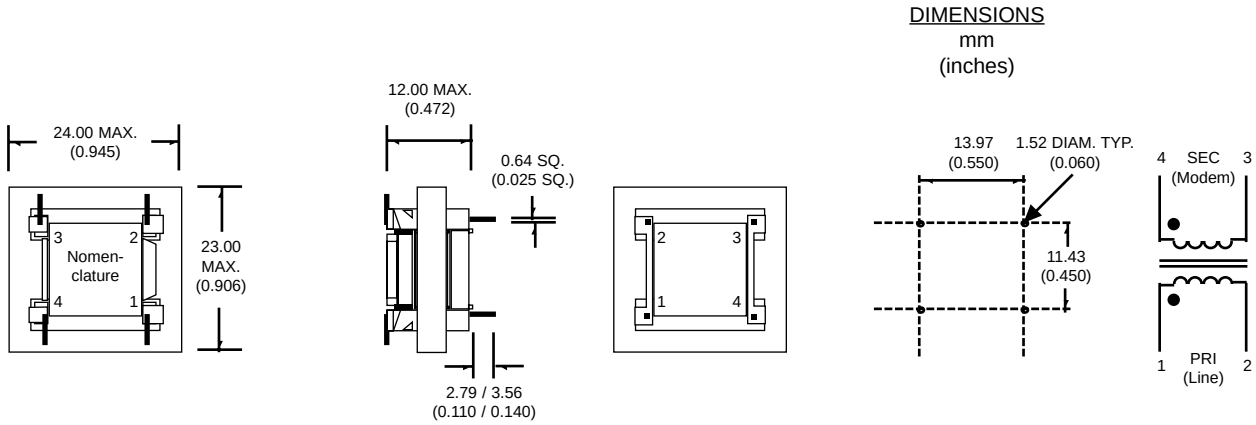
PRODUCT COMPLIANCE

- UL / C-UL recognized file number: E171120

NOMENCLATURE (Fig. 1)



MECHANICAL DIMENSIONS (Fig. 2)



Literature Number: DSA.MIT-115

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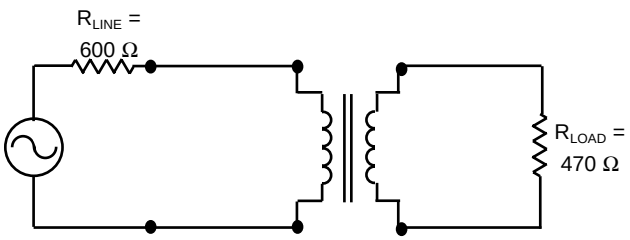
ELECTRICAL PERFORMANCE SPECIFICATIONS

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

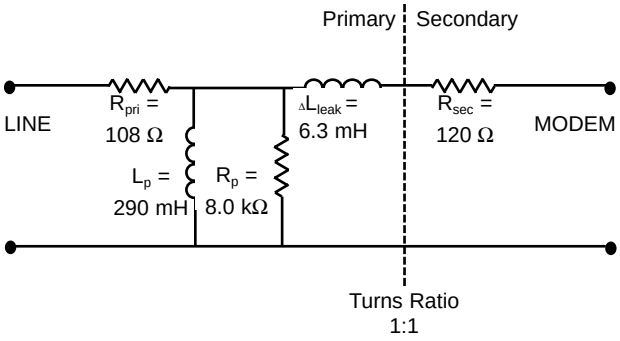
PARAMETERS	CONDITIONS	MIN	TYP	MAX	UNITS
Impedance	Reflected on Primary With Load on Secondary	- -	600 470	- -	Ohms Ohms
Total Harmonic Distortion	@ 600 Hz, -10 dBm	-	-60	-	dB
Insertion Loss	Per IEEE method; @ 1000 Hz	-	2.00	2.50	dB
Return Loss	200 Hz - 1000 Hz 1000 Hz - 4000 Hz Per 600 Ohm Match (Fig. 3)	5 12	- -	- -	dB dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 Min. HiPot Voltage Duration Trip Leakage Current	1000 1250 2 -	- - - -	- - - 200	Vrms Vrms Sec µA
Frequency Response	300 Hz - 600 Hz 600 Hz - 3500 Hz	- -	±2.50 ±0.65	- -	dB 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	- -	108 120	- -	Ohms Ohms
DC Current in Primary	-	-	100	-	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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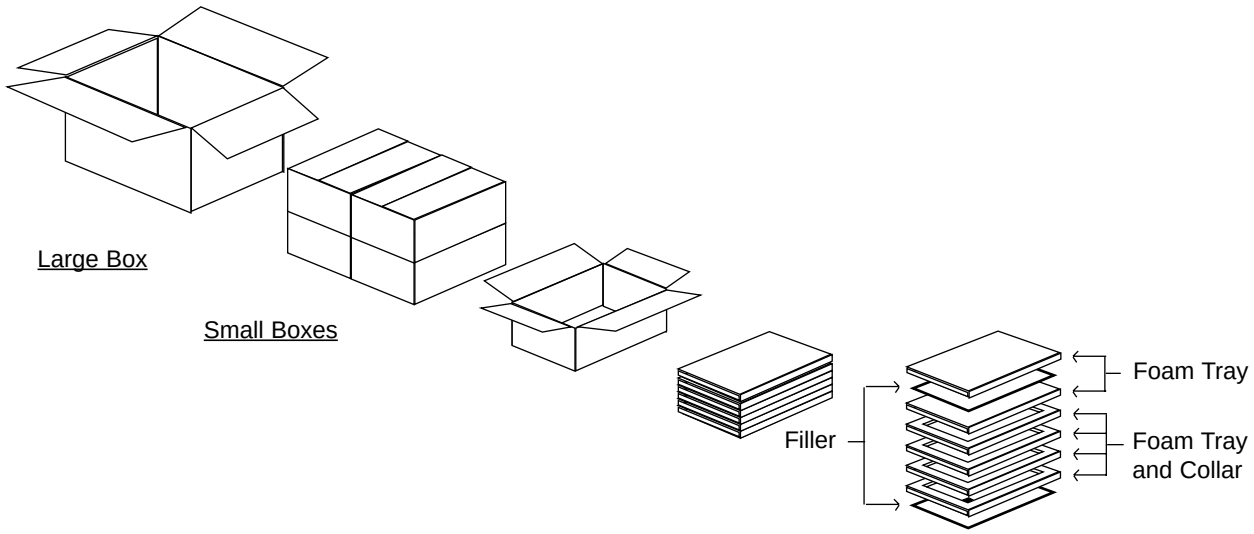
STANDARD PACKAGING (Fig. 9)



Packaging

Material	Contents	#Transformers
Large Box	4 Small Boxes	1408
Small Box	4 Trays	352
Tray	88 Transformers	88
---	Transformer	1

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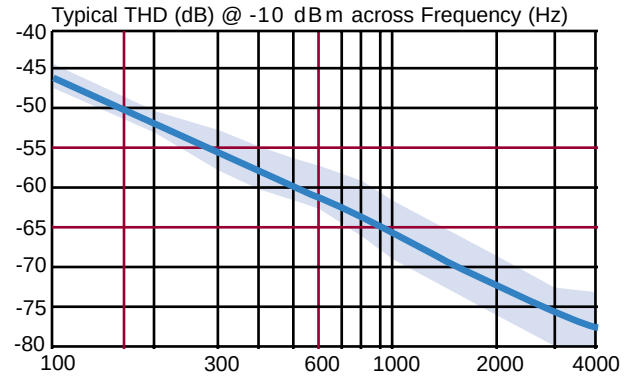
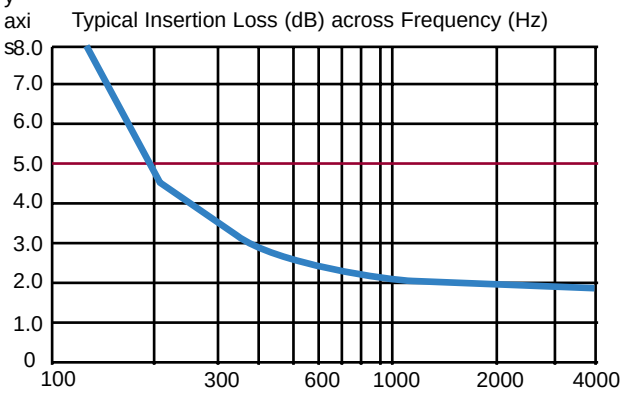
PERFORMANCE DATA

TOTAL HARMONIC DISTORTION (Fig. 5)



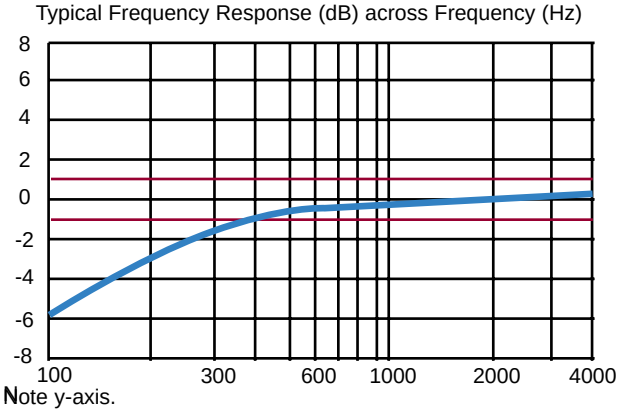
Note y-axis.

INSERTION LOSS (Fig. 6)



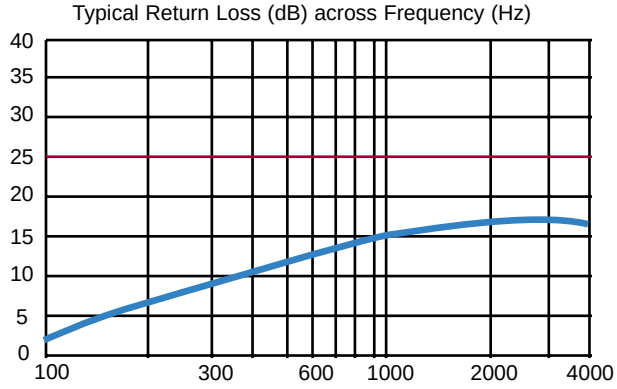
Note y-axis.

FREQUENCY RESPONSE (Fig. 7)



Note y-axis.

RETURN LOSS (Fig. 8)



(Measured per 600 Ω Match depicted in Fig. 3)

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