

**FEATURES**

- Suitable for modem speeds up to V.34 (33.6 kbps)
- Cost-effective “Wet” coupler construction reduces DAA components..
- Total Harmonic Distortion rated -79 dB typ. @ 600 Hz, -10 dBm typ.
- Insertion Loss rated 3.25 dB ype. @1000 Hz..
- Complies with IEC60950 Supplementary safety norms. Designed to meet Bellcore GR-1089-CORE surge test.
- Reflects 600 Ohms on Primary with 260 Ohms Secondary Load. See circuit for best Return Loss.
- Uses minimal external components for impedance matching for pan-European CTR-21 telephone lines.
- Small PCB footprint (24.0 mm x 23.0 mm) Low-Profile (12.0 mm). Industry-standard pin configuration.

**DESCRIPTION**

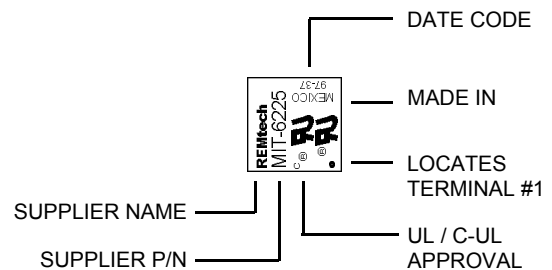
The REMtech Magnetics MIT-6225 is a “Wet” Modem Isolation Transformer suitable for up to V.34 (33.6 kbps) analog modem and voice applications compliant with Worldwide safety norms.

MIT-6225 applications include fax machines, DBS/ Set-top boxes, computer telephony, POS, security, and electric, metering applications. May be suitable for pan-European CTR-21 designs, and meets new UL1950 safety requirements for the domestic market.

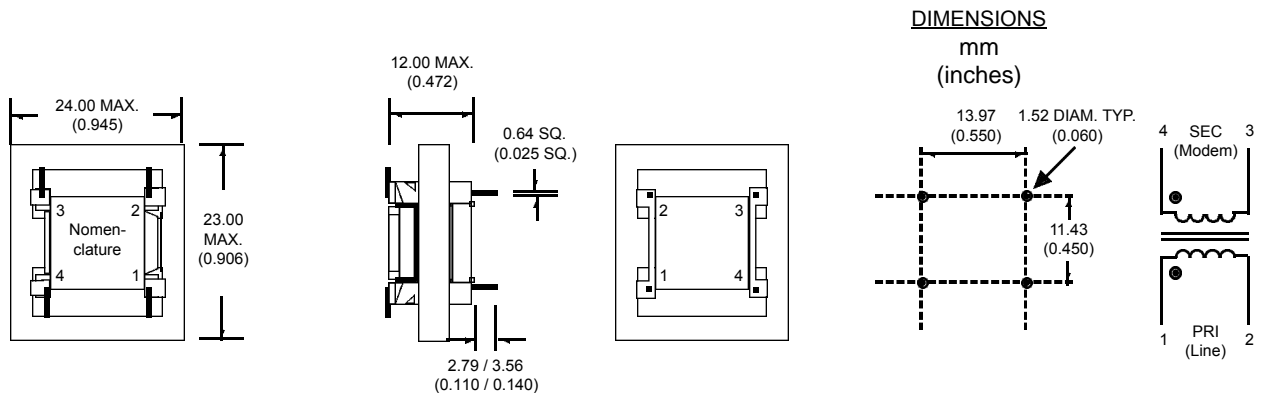
**PRODUCT COMPLIANCE**

- UL / C-UL recognized file number: E171120
- BSI certicate number(s): 8047, 8048
- BAPT certificate of recognition: 1905

**NOMENCLATURE (Fig. 1)**



**MECHANICAL DIMENSIONS (Fig. 2)**



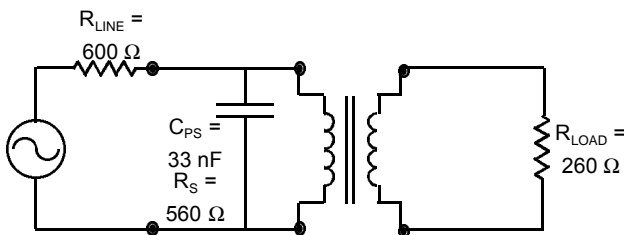
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## ELECTRICAL PERFORMANCE SPECIFICATIONS

**Electrical Performance Specifications ( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise specified)**

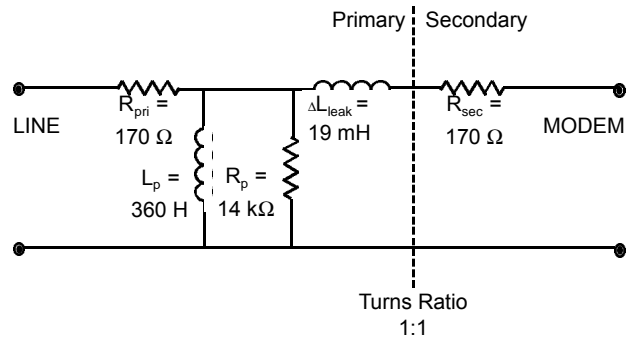
PARAMETERS	CONDITIONS	MIN	TYP	MAX	UNITS
Impedance	Reflected on Primary With Load on Secondary	-	600	-	Ohms
		-	260	-	Ohms
Total Harmonic Distortion	@ 600 Hz, -10 dBm	-	-79		dB dB
Insertion Loss	Per IEEE method; @ 1000 Hz	-	3.25	3.75	dB
Return Loss	300 Hz - 3000 Hz Per 600 Ohm Match (Fig. 3) Per CTR21 Pan-Euro Match (Fig. 10)	18	-	-	dB
		8			dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 Min.	1500	-	-	Vrms
	HiPot Voltage	2000	-	-	Vrms
	Duration	2	-	-	Sec
	Trip Leakage Current	-	-	200	$\mu\text{A}$
Frequency Response	200 Hz - 4000 Hz	-	$\pm 2.20$	-	dB
Longitudinal Balance	Per FCC part 68.310 60 Hz - 1000 Hz 1000 Hz - 4000 Hz	60	-	-	dB
		40	-	-	dB
DC Resistance @ $20^\circ\text{C}$ , $\pm 10\%$	Primary Winding	-	170	-	Ohms
	Secondary Winding	-	170	-	Ohms
DC Current in Primary	-	-	50	-	mADC
Turns Ratio	Primary to Secondary; $\pm 2\%$	-	1:1	-	Turns
Operating Temperature	-	-40	-	105	$^\circ\text{C}$
Storage Temperature	-	-40	-	125	$^\circ\text{C}$
Soldering Temperature	10 Sec. Max.	-	-	260	$^\circ\text{C}$

### 600 OHM MATCH (Fig. 3)



### SCHEMATIC EQUIVALENT (Fig. 4)

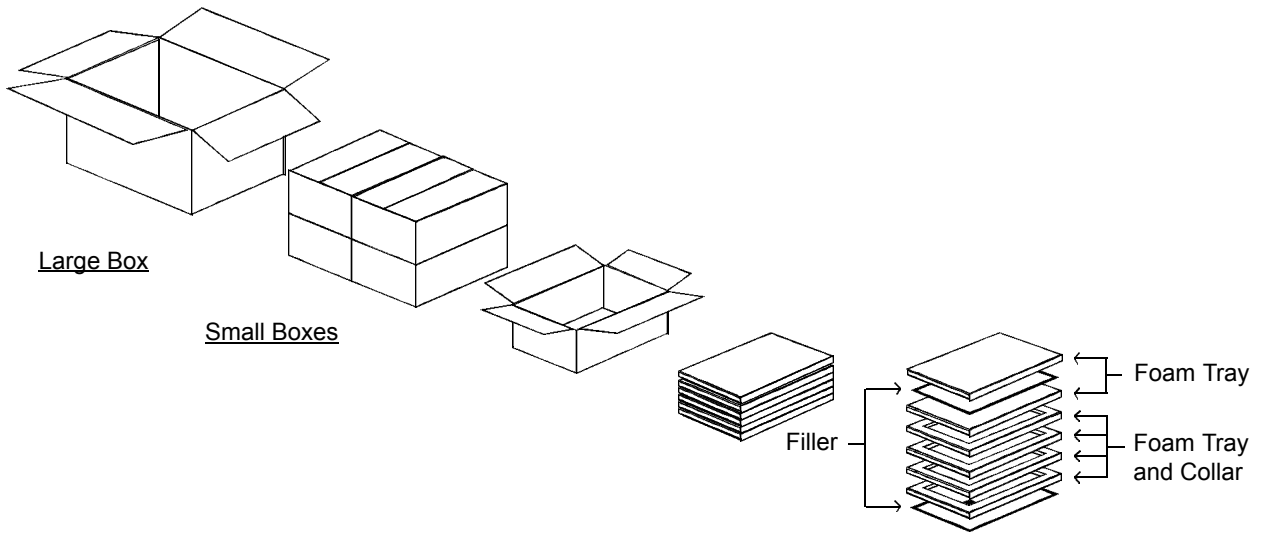
(Typical Transformer Model @ 1 V, 1 kHz)



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**STANDARD PACKAGING (Fig. 9)**

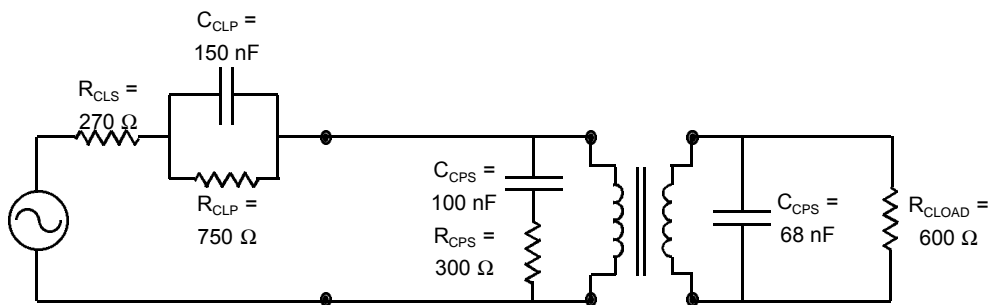


Packaging

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

**PAN-EUROPEAN CTR21 MATCH (Fig. 10)**

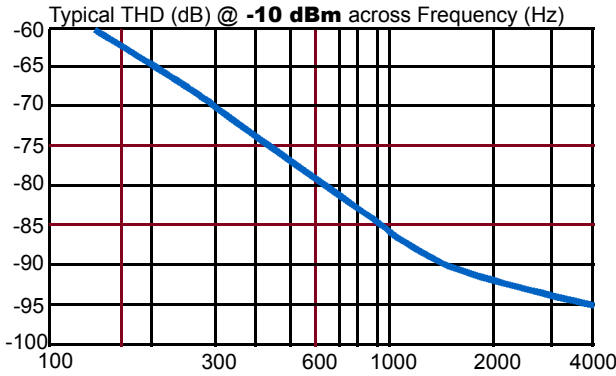
(Application circuits available on request for specific national match requirements.)



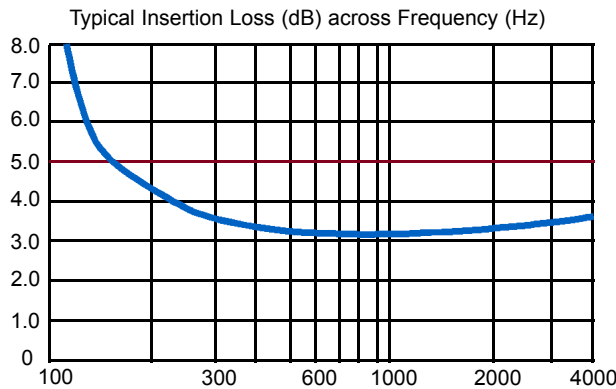
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**PERFORMANCE DATA**

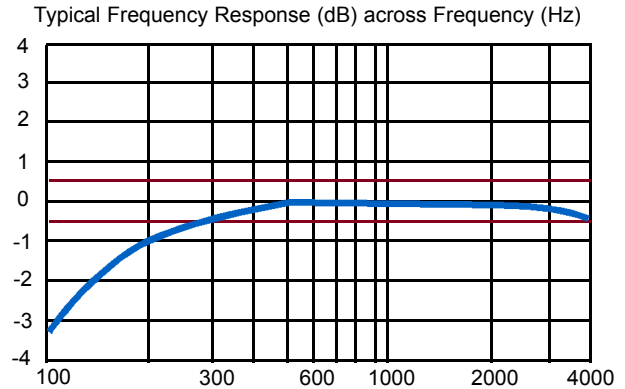
**TOTAL HARMONIC DISTORTION (Fig. 5)**



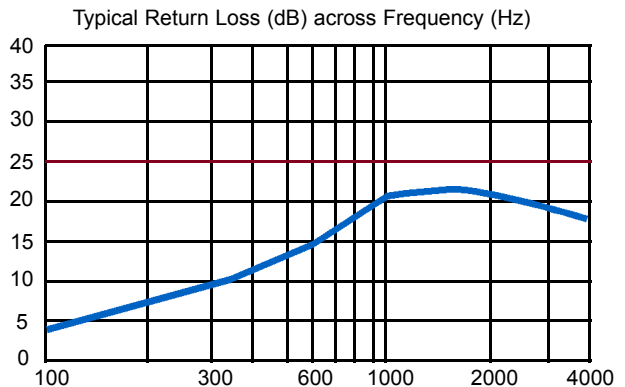
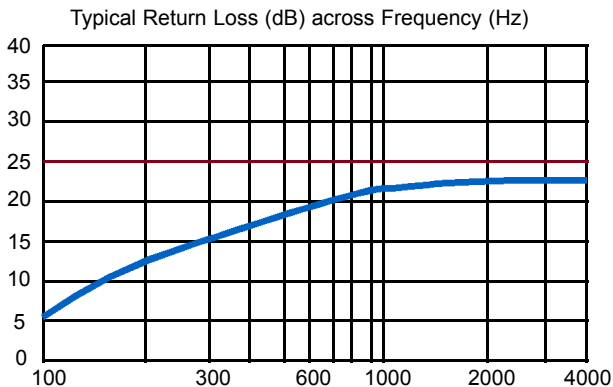
**INSERTION LOSS (Fig. 6)**



**FREQUENCY RESPONSE (Fig. 7)**



**RETURN LOSS (Fig. 8)**



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