



Analog Telephony/Modem Couplers

FEATURES

- Suitable for modem speeds up to V.32bis (14.4 kbps). May be adapted to V.34 (33.6 kbps).
- Total Harmonic Distortion rated -84 dB typ. @ 600 Hz, -10 dBm. (Improved !)
- Insertion Loss rated 1.20 dB typ. @ 2000 Hz.
- Complies with IEC60950 Reinforced safety norms.
- Matches 600 Ohm and complex impedance telephone lines.
- Uses minimal external components for impedance matching.
- Very small PCB footprint (18.3 mm x 18.3 mm).
- Low-profile (12.6mm)
- Industry-standard pin configuration.

DESCRIPTION

The Sumida EMIT-1200L is a "Dry" Encapsulated Modem Isolation Transformer suitable for up to V.32bis (14.4 kbps) fax, computer telephony, and other analog modem and voice routing applications compliant with International safety norms.

Newly improved distortion rating for EMIT-1200L may be adaptable to V.34 (33.6 kbps) modem speeds.

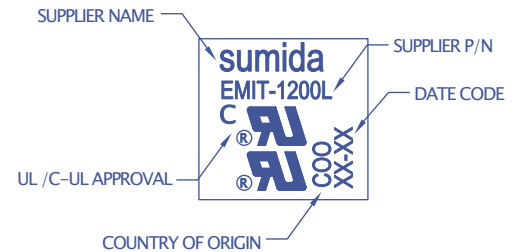
EMIT-1200L improves EMIT-1200 to a Low-Profile height with identical characteristics and cost.

PRODUCT COMPLIANCE

- UL/C-UL recognized file number: E171120
- BABT certificate of recognition: 1905/2080/20/81
- TÜV certificate of recognition: B0112 45749 001

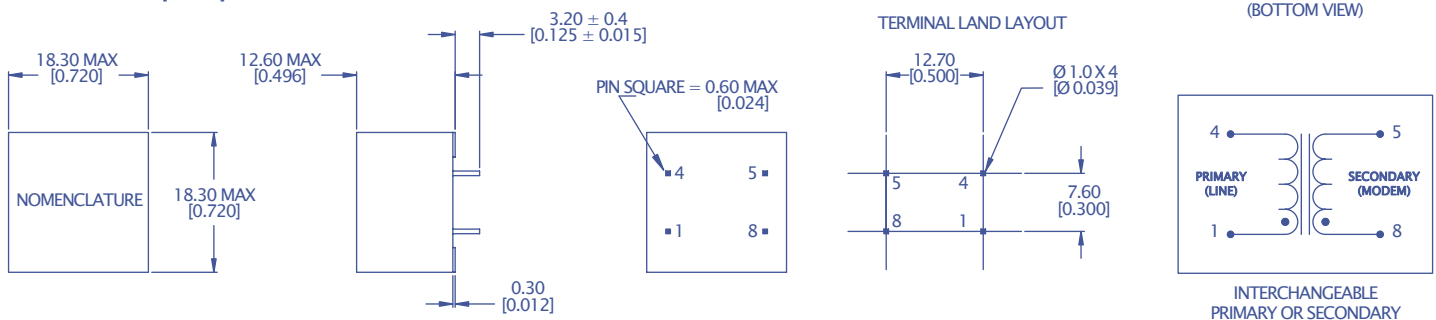


NOMENCLATURE (FIG. 1)



MECHANICAL DIMENSIONS (FIG. 2)

DIMENSIONS: MILLIMETERS [INCHES]



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- North America
- Hong Kong
- Europe

Tel. 1 847 545 6700
 Fax. 1 847 545 6720
 Tel. 852 2880 6688
 Fax. 852 2565 9600
 Tel. 32 89 328850
 Fax. 32 11 300890

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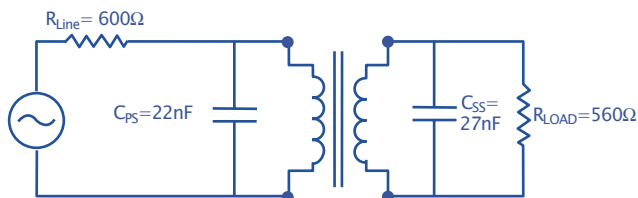
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ELECTRICAL PERFORMANCE SPECIFICATIONS

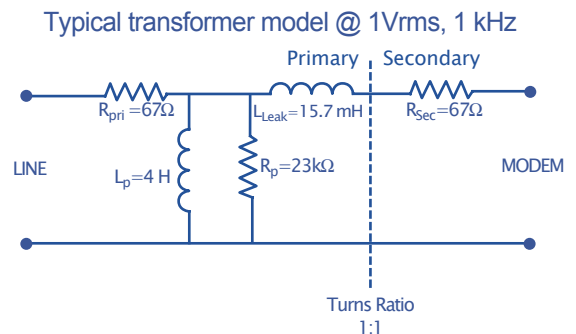
Parameters	Conditions	Min	Typ	Max	Units
Impedance	Reflected on Primary with load on Secondary		600 560		Ohms
Total Harmonic Distortion	@ 150 Hz, -3dBm @ 600 Hz, -10 dBm		-84 -68	-76 -60	dB
Insertion Loss	Per IEEE method; @2000 Hz		1.20		dB
Return Loss	200 Hz - 4000 Hz Per 600 Ohm Match (Fig.3) Per CTR21 Pan-Euro Match (Fig.5)	18 22			dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 min. HiPot Voltage Duration Trip Leakage Current	3000 3750 2		200	Vrms Vrms Sec μ A
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
DC Resistance @ 20°C, $\pm 10\%$	Primary winding Secondary winding		67 67		Ohms
DC current in Primary			0		mADC
Turns Ratio	Primary to Secondary; $\pm 2\%$		1:1		Turns
Operating temperature		-40		105	$^{\circ}$ C
Storage temperature		-40		125	$^{\circ}$ C
Soldering temperature	10 Sec. Max			260	$^{\circ}$ C

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

600 OHM MATCH (FIG.3)



SCHEMATIC EQUIVALENT (FIG.4)



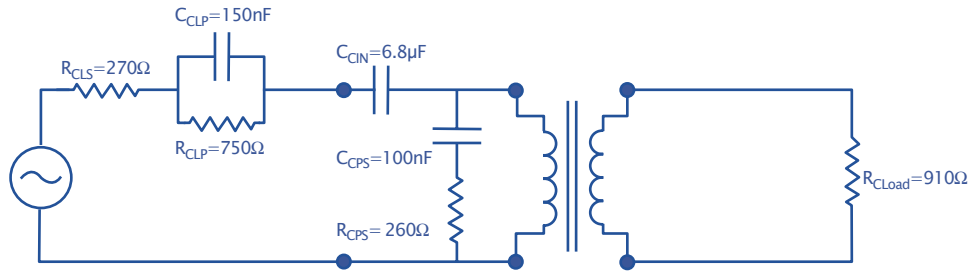
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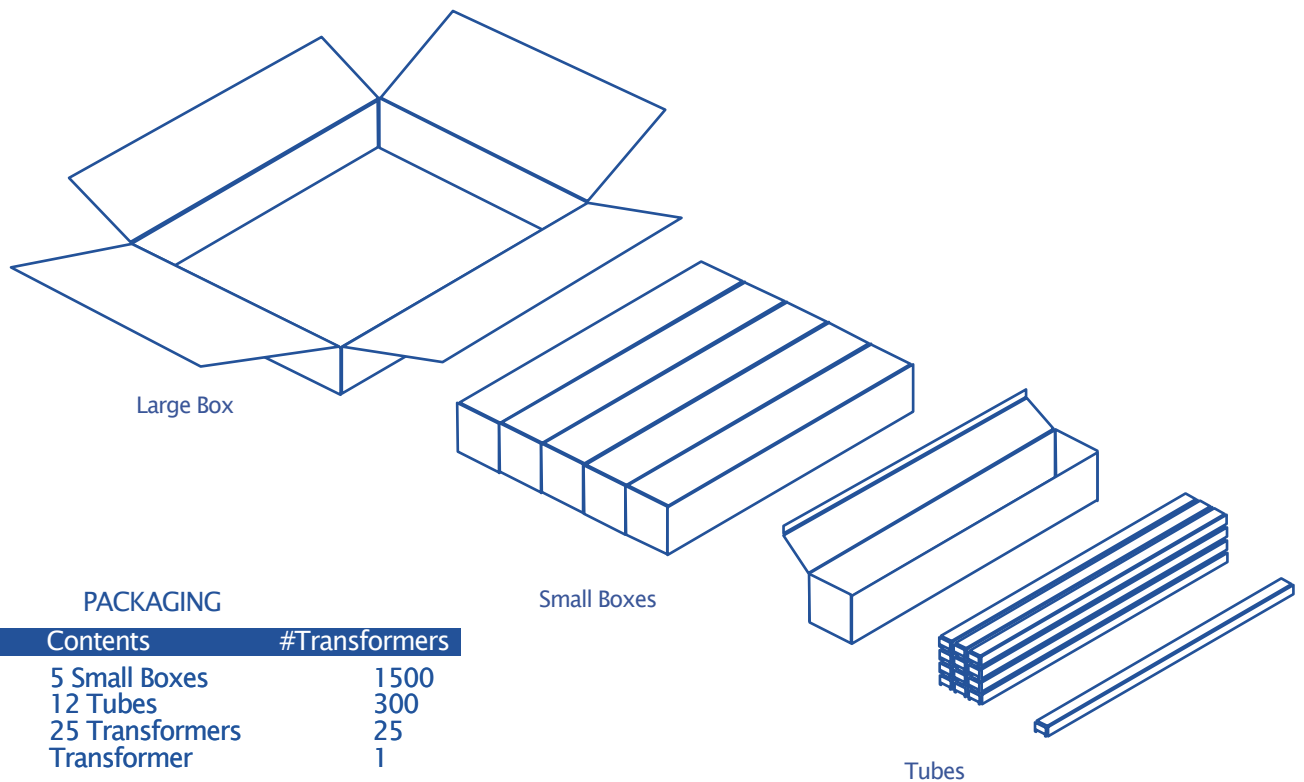


PAN-EUROPEAN CTR21 MATCH (FIG.5)

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



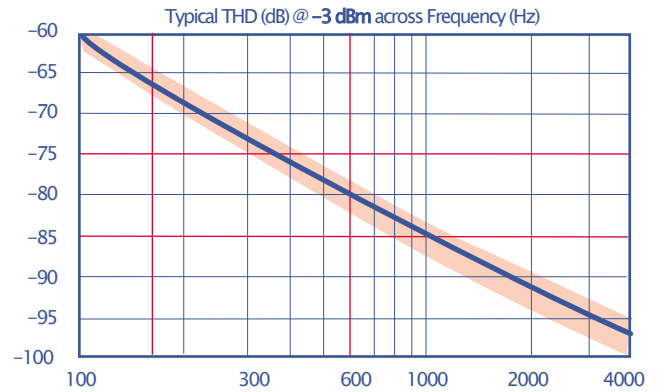
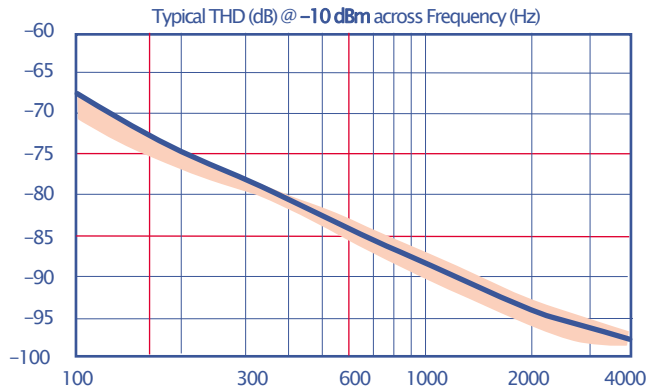
STANDARD PACKAGING (FIG.6)



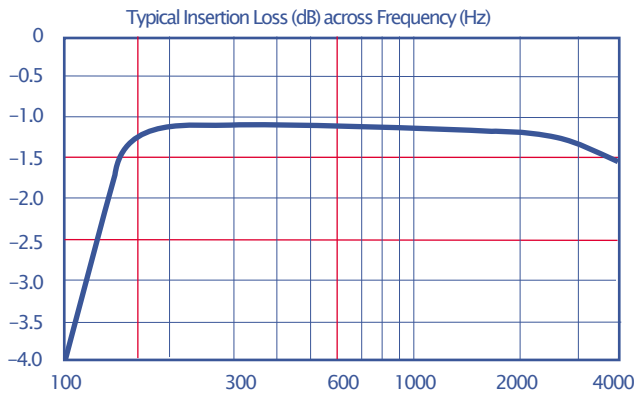
PACKAGING

Material	Contents	#Transformers
Large Box	5 Small Boxes	1500
Small Box	12 Tubes	300
Tube	25 Transformers	25
--	Transformer	1

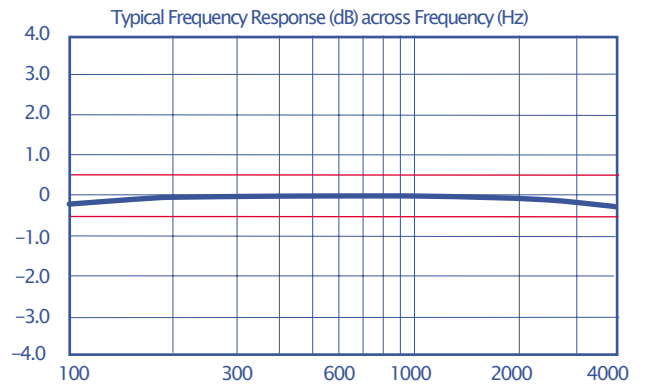
TOTAL HARMONIC DISTORTION



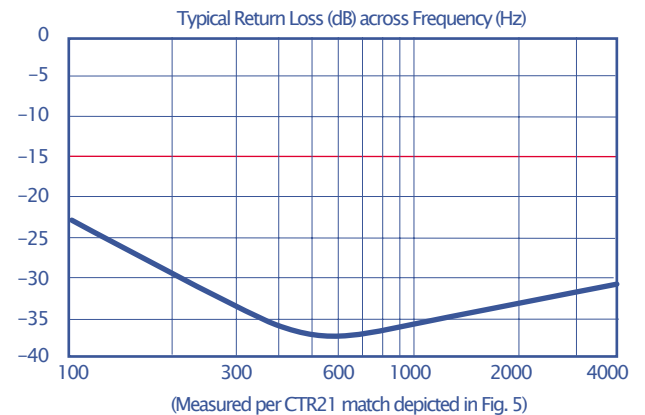
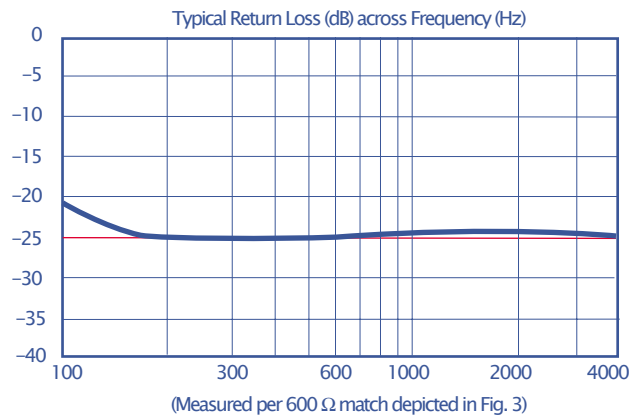
INSERTION LOSS



FREQUENCY RESPONSE



RETURN LOSS



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