



Analog Telephony/Modem Couplers

FEATURES

- Suitable for modem speeds up to V.92/V.90 (56 kbps).
- Cost-effective "Wet" coupler construction reduces DAA components.
- Total Harmonic Distortion rated -80 dB typ. @ 600 Hz, -10 dBm, and -80 dB typ. @ 150 Hz, -3 dBm.
- Complies with UL 1950 safety norms, but tested to higher 4 kVrms dielectric breakdown isolation.
- Reflects 600 Ohms on Primary with 260 Ohms Secondary Load.
- Industry-standard pin configuration.

DESCRIPTION

The Sumida EMIT-6229 is a "Wet" Modem Isolation Transformer suitable for up to V.92/V.90 (56 kbps) consumer and internet analog modem applications compliant with Domestic safety norms.

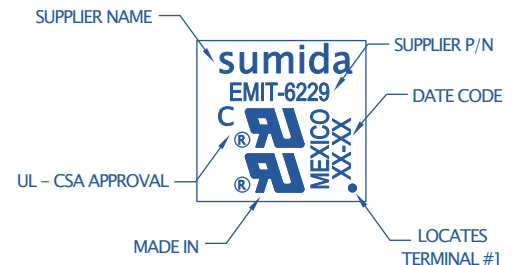
Due to its "Wet" construction, EMIT-6229 saves DAA cost by eliminating circuitry for diverting telephone line DC from the transformer.

EMIT-6229 is a UL1950 recognized component compared to EMIT-5229.

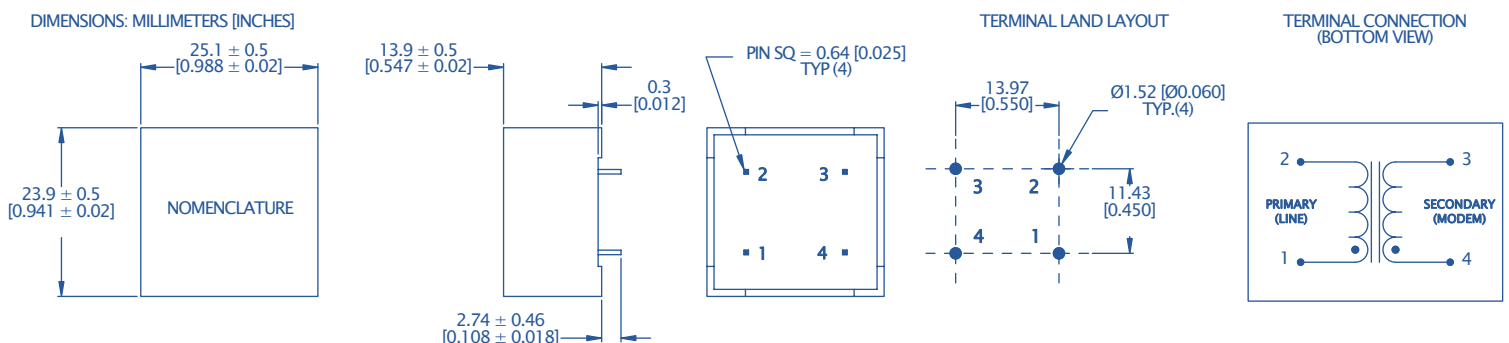
PRODUCT COMPLIANCE

- UL/C- UL recognized file number: E171120

NOMENCLATURE (FIG. 1)



MECHANICAL DIMENSIONS (FIG. 2)



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www.sumida.com

• North America

Tel. 1 847 545 6700
Fax. 1 847 545 6720

• Hong Kong

Tel. 852 2880 6688
Fax. 852 2565 9600

• Europe

Tel. 32 89 328850
Fax. 32 11 300890

• Singapore

Tel. 65 296 3388
Fax. 65 296 3390

• Taiwan

Tel. 886 2 2523 6368
Fax. 886 2 2523 6369

• Japan

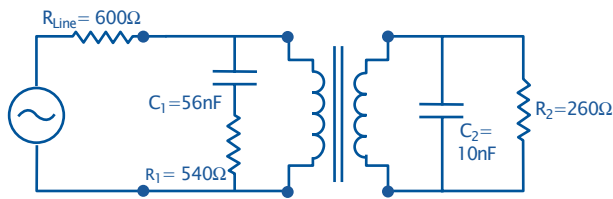
Tel. 813 3980 2212
Fax. 813 3980 2213

ELECTRICAL PERFORMANCE SPECIFICATIONS

Performance	Conditions	Min	Typ	Max	Units
Impedance	Reflected on Primary with load on Secondary		600 260		Ohms
Total Harmonic Distortion	@ 600 Hz, -10 dBm @ 150 Hz, -3 dBm		-80 -80		dB
Insertion Loss	Per IEEE method; @1 kHz, 70mADC		3.5		dB
Return Loss	1000 Hz (Per 600Ω match, see Fig.3)	18			dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 min. HiPot Voltage Duration Trip Leakage Current	3000 4000 2		200	Vrms Vrms Sec μA
Frequency Response	200 Hz - 400 Hz 400 Hz - 600 Hz 600 Hz - 1000 Hz 1000 Hz - 4000 Hz		-4.5 -2.0 -1.2 +0.7		dB
Longitudinal Balance	Per FCC part 68.310 60 Hz - 1000 Hz 1000 Hz - 4000 Hz	60 40			dB
DC Resistance @ 20°C, ±10%	Primary winding (R_{pri}) Secondary winding (R_{sec})		170 170		Ohms
DC current in Primary				70	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

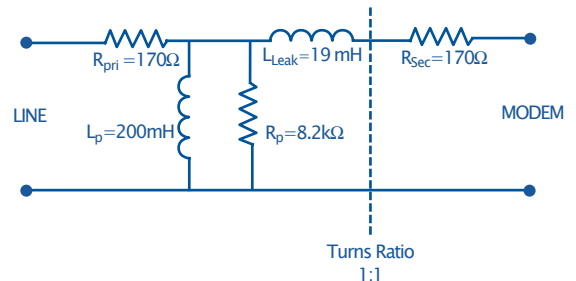
Electrical Performance Specifications (TA = 25°C unless otherwise specified)

600 OHM MATCH (FIG.3)



SCHEMATIC EQUIVALENT (FIG.4)

Typical transformer model @ 1V, 1 kHz

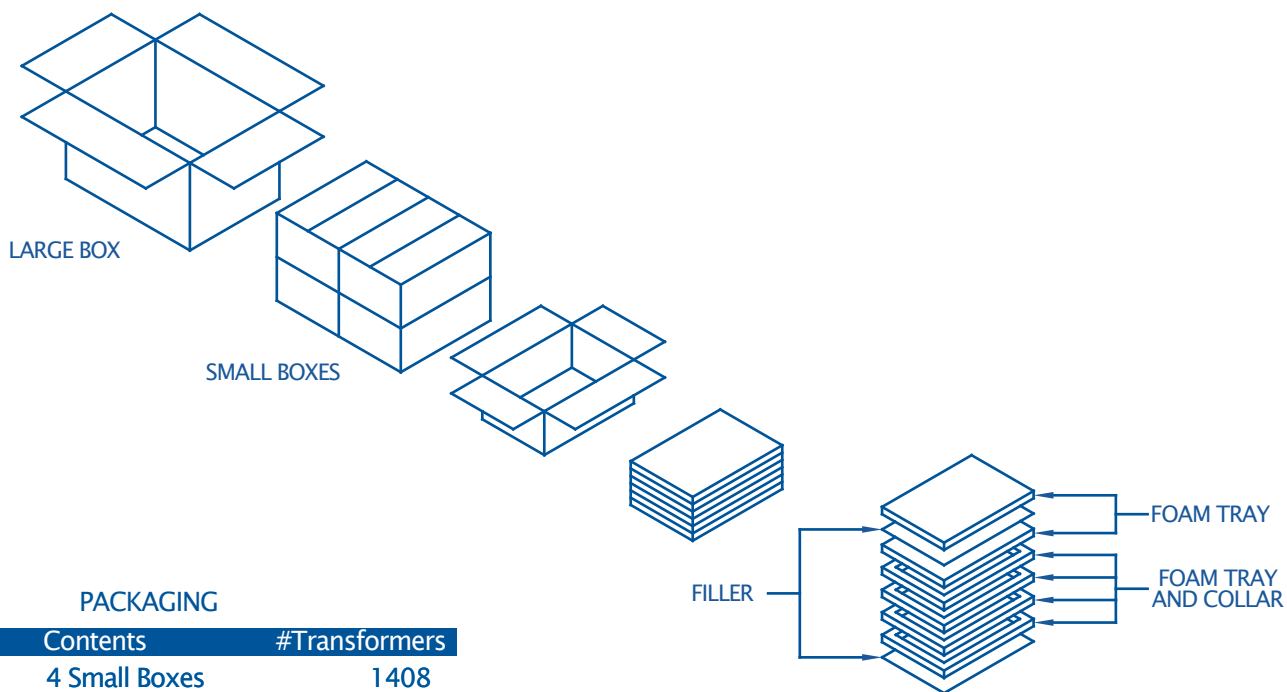


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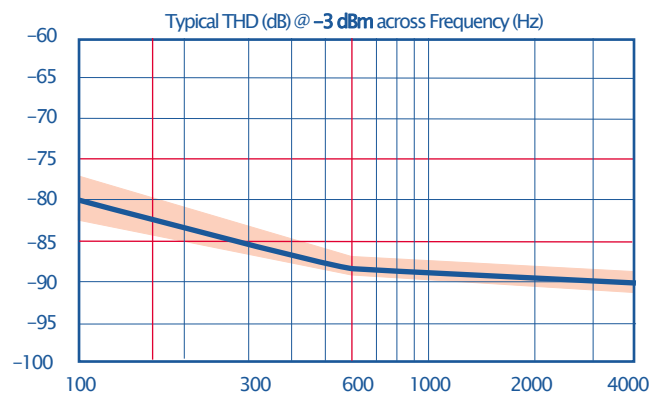
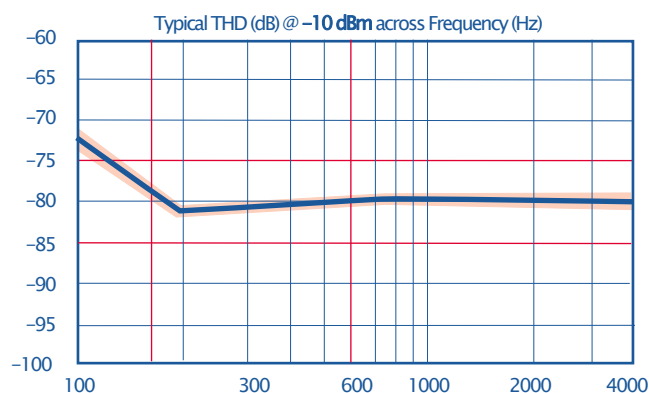
STANDARD PACKAGING (FIG.6)



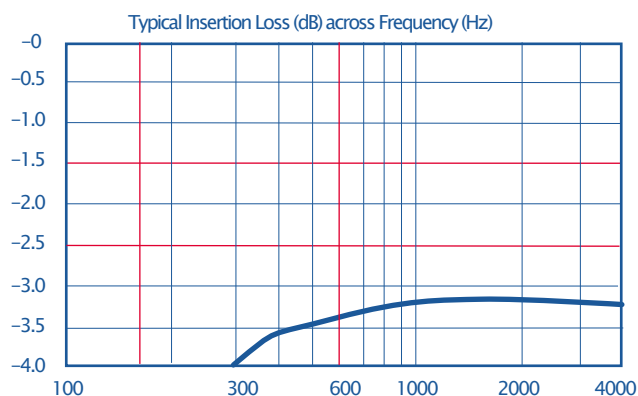
PACKAGING		
Material	Contents	#Transformers
Large Box	4 Small Boxes	1408
Small Box	4 Trays	352
Tray	88 Transformers	88
	Transformer	1



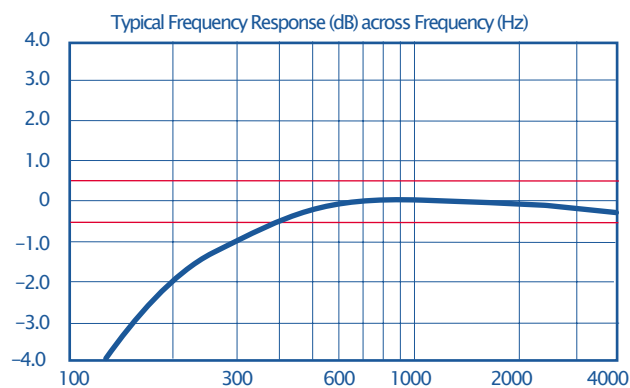
TOTAL HARMONIC DISTORTION



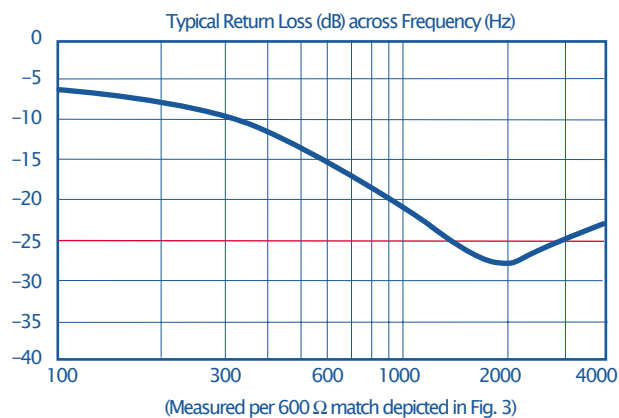
INSERTION LOSS



FREQUENCY RESPONSE



RETURN LOSS



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