

### FEATURES

- Suitable for modem speeds up to V.90 (56 kbps).
- Total Harmonic Distortion rated -88 dB typ. @ 600 Hz, -10 dBm and -70 dB typ. @ 150 Hz, -3 dBm.
- Insertion Loss rated 3.95 dB typ. @ 1000 Hz.
- Complies with UL1459 safety norms.
- Reflects 600 Ohms on Primary with 200 Ohms Secondary Load.
- Ultra-small PCB footprint (20.9 mm x 8.4 mm).
- Thin (PCMCIA) Profile (4.4 mm).
- SMT Industry-standard pin configurations.

### DESCRIPTION

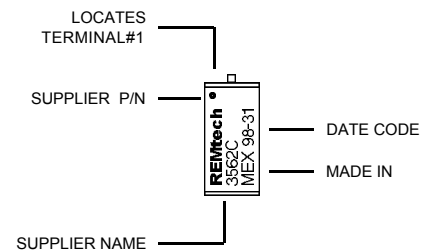
The REMtech Magnetics SMIT-3562 is a “Dry” SMT Modem Isolation Transformer suitable for up to V.90 (56 kbps) consumer and internet analog modem applications requiring compliant with Domestic safety norms.

SMIT-3562 improves distortion by about 10 dB compared to competing transformers in its ultra-small and thin size class. Thus, it is our industry’s only known transformer approaching true 56K modem speeds for PCMCIA cards, Laptops, and PDAs.

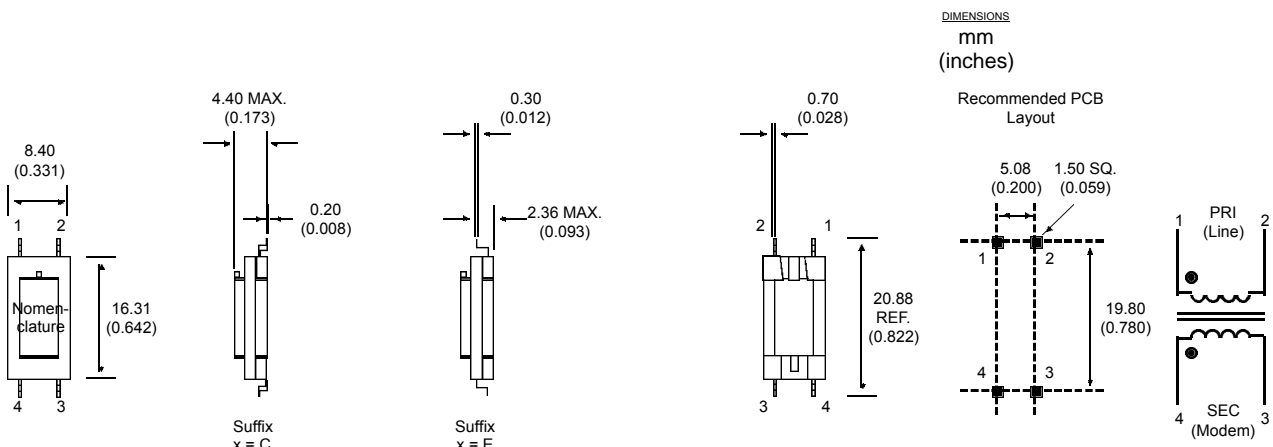
### PRODUCT COMPLIANCE

- UL / C-UL recognized file number: E171120

### NOMENCLATURE (Fig. 1)



### MECHANICAL DIMENSIONS (Fig. 2)



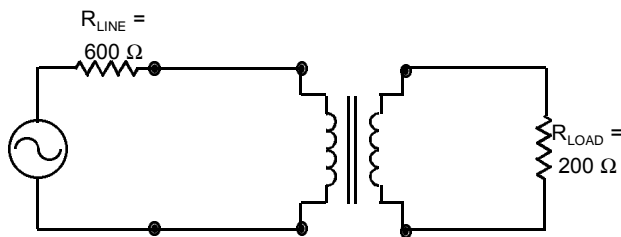
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**ELECTRICAL PERFORMANCE SPECIFICATIONS**

**Electrical Performance Specifications (T<sub>A</sub> = 25 °C unless otherwise specified)**

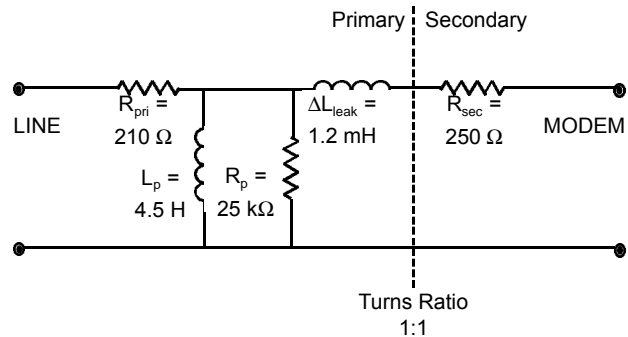
PARAMETERS	CONDITIONS	MIN	TYP	MAX	UNITS
Impedance	Reflected on Primary With Load on Secondary	-	600	-	Ohms
		-	200	-	Ohms
Total Harmonic Distortion	@ 600 Hz, -10 dBm @ 150 Hz, -3 dBm	-	-88	-85	dB
		-	-70	-65	dB
Insertion Loss	Per IEEE method; @ 1000 Hz	-	3.95	4.25	dB
Return Loss	200 Hz - 4000 Hz Per 600 Ohm Match (Fig. 3)	22	-	-	dB
Dielectric Breakdown Isolation Production methods applied:	Safety Standard tested 1 Min. HiPot Voltage Duration Trip Leakage Current	1000	-	-	Vrms
		1250	-	-	Vrms
		2	-	-	Sec
		-	-	200	µA
Frequency Response	200 Hz - 4000 Hz	-	±0.15	-	dB
Longitudinal Balance	Per FCC part 68.310 60 Hz - 1000 Hz 1000 Hz - 4000 Hz	60	-	-	dB
		40	-	-	dB
DC Resistance @ 20°C, ±10%	Primary Winding Secondary Winding	-	210	-	Ohms
		-	250	-	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)



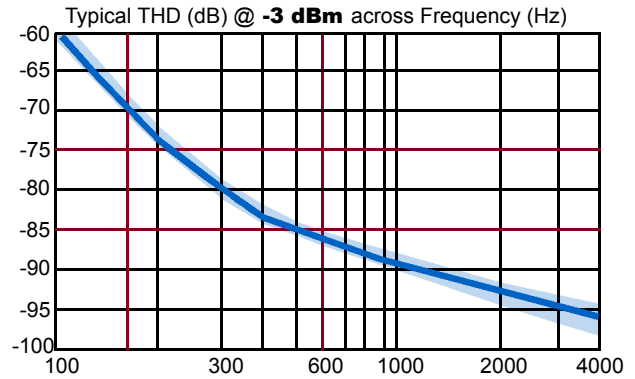
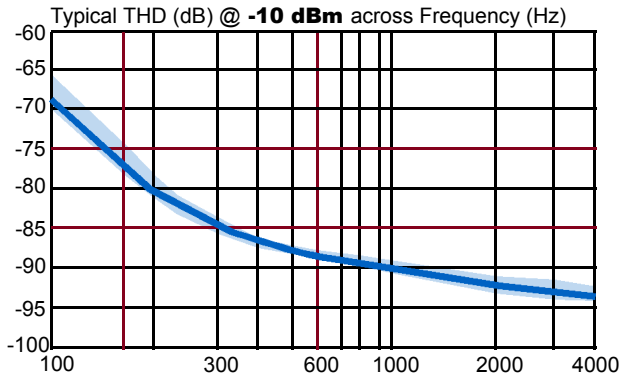
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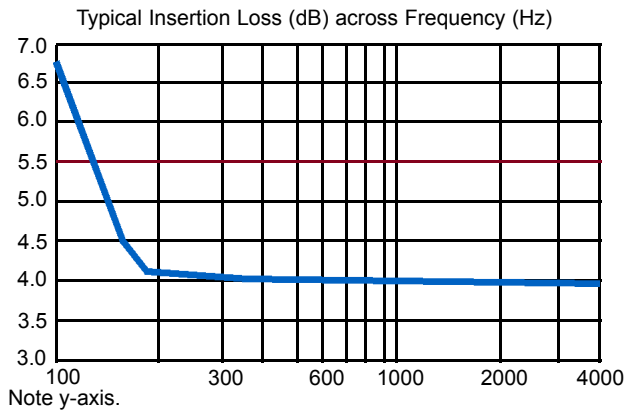


**PERFORMANCE DATA**

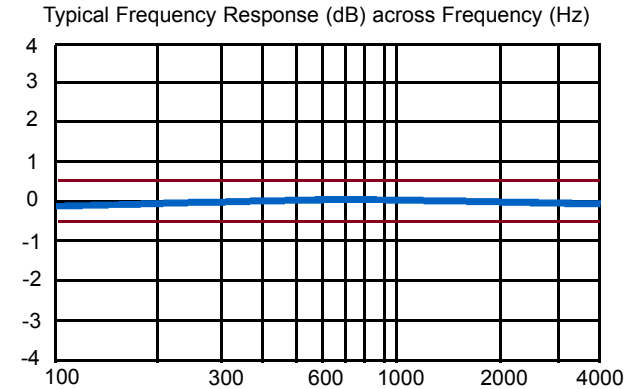
**TOTAL HARMONIC DISTORTION (Fig. 5)**



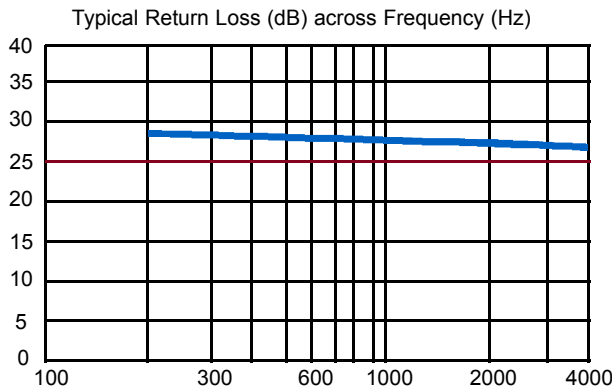
**INSERTION LOSS (Fig. 6)**



**FREQUENCY RESPONSE (Fig. 7)**



**RETURN LOSS (Fig. 8)**



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