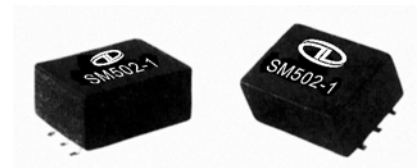


SURFACE MOUNT TELECOM TRANSFORMER SM502-1

FEATURES

- Subminiature
- Vacuum encapsulated
- BS415 approval for SM-LP5002**
- UL1459 File No. E173817 Insulation System
- EN60950 Recognized File E173817
- 7.36mm seated Height
- Tested at 4600 Vrms
- Weight \approx 2 gram
- BABT Approval No. CRC 0047



APPLICATIONS

- MODEMS
- LAPTOP COMPUTERS
- TELECOMMUNICATIONS
- INSTRUMENTATION

ELECTRICAL SPECIFICATIONS AT 25°C

IMPEDANCE	PRIMARY	600 Ω	SHUNT INDUCTANCE (MIN)	3.8 H
	SECONDARY	600 Ω	SHUNT LOSS (MIN)	7500 Ω
TURNS RATIO		1 : 1	LEAKAGE INDUCTANCE @1KHz (TYP)	7 mH
INSERTION LOSS @2KHz (MAX)		3.0 dB	UNBALANCE D.C. CURRENT	0 mA
FREQUENCY RESPONSE @200-4000Hz (MAX)		\pm 0.25 dB	DC RESISTANCE* PRIMARY (\pm 15%)	150 Ω
RETURN LOSS @200-4000Hz (MIN)		24 dB	SECONDARY(\pm 15%)	150 Ω
LONGITUDINAL BALANCE (MIN)		80 dB	INSULATION RESISTANCE @500VDC (MIN)	100 M Ω
DISTORTION (TYP)		-85 dB	DIELECTRIC STRENGTH for 1 minute	4600 Vrms
POWER LEVEL		10 dBm		

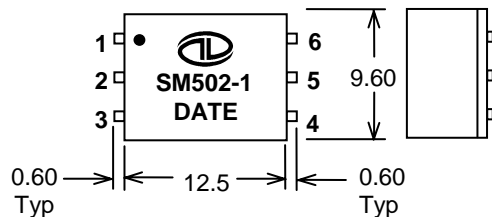
Note : for use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech)

* SM502-1 Is symmetrical meaning there is no real primary or secondary winding.

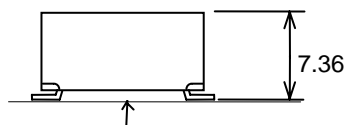
**SM502-1 is identical to SM-LP5002. SM-LP5002 is European version.

Terminal finish is compliant to RoHS requirements. Solder in accordance with J-STD-020C

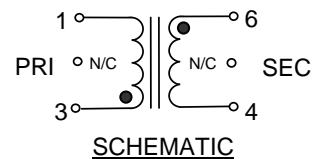
OUTLINE DIMENSIONS



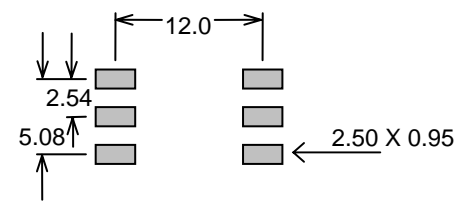
ALL DIMENSIONS IN MILLIMETERS
TOLERANCE : .XX = \pm 0.25MM



Leads Coplanarity = 0.15mm Maximum



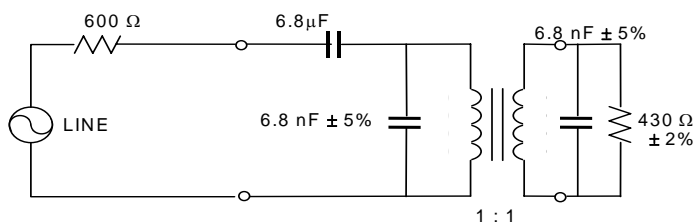
SCHEMATIC



Suggested PCB Layout

RECOMMENDED CIRCUITS

600 Ohm Matching (speech)



BS6305 Class (A) Matching (non-speech)

