



This part is **OBSOLETE**, the **SM501-1** is a possible replacement
(Inventory Available letter www.datatronics.com/pdf/sm502-1-inventory-available.pdf)
SURFACE MOUNT TELECOM TRANSFORMER SM502-1

FEATURES

- Subminiature
- Vacuum encapsulated
- UL1459 File No. E173817 Insulation System
- EN60950 Recognized File E173817
- Operating Temperature -20°C to +85°C



- 7.36mm seated Height
- Tested at 4600 Vrms
- Weight ≈ 2 gram
- BABT Approval No. CRC 0047
- Storage Temperature -20°C to +85°C



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)		±0.25 dB	DC RESISTANCE* PRIMARY (± 15%)	150 Ω
RETURN LOSS @200-4000Hz (MIN)		24 dB	SECONDARY(± 15%)	150 Ω
LONGITUDINAL BALANCE (MIN)		80 dB	INSULATION RESISTANCE @500VDC (MIN)	100 MΩ
DISTORTION (TYP)		-85 dB	DIELECTRIC STRENGTH for 1 minute	4600 Vrms
POWER LEVEL		10 dBm		

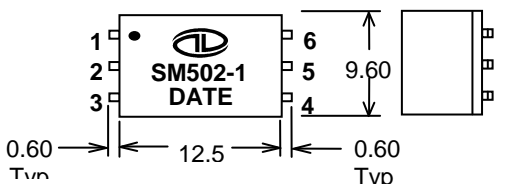
Note : for use with recommended circuit (BS6305 impedance Class A non-speech or Class B speech)

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

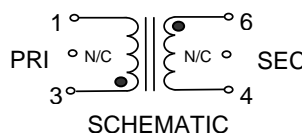
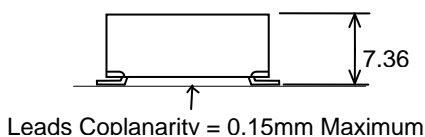
**SM502-1 is identical to SM-LP5002. SM-LP5002 is European version.

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

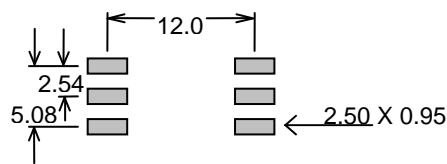
OUTLINE DIMENSIONS



ALL DIMENSIONS IN MILLIMETERS
TOLERANCE: XY ± 0.25MM



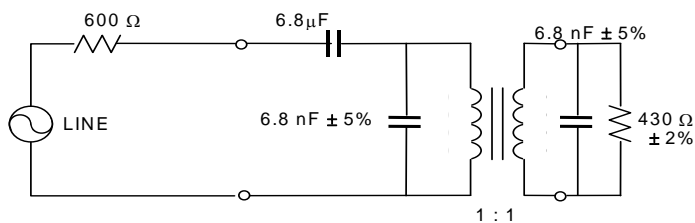
SCHMATIC



Suggested PCB Layout

RECOMMENDED CIRCUITS

600 Ohm Matching (speech)



BS6305 Class (A) Matching (non-speech)

