Hammond Mfg. Co. Ltd., Electronics Division

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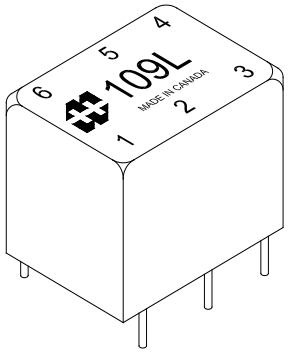
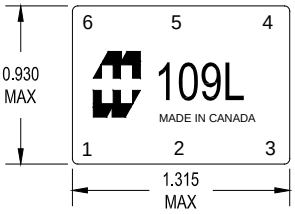
109L

MINIATURE EPOXY POTTED AUDIO TRANSFORMER



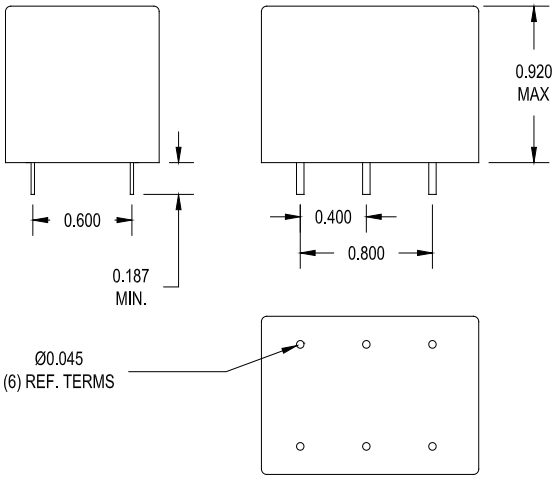
- Audio input, line matching and output transformers
- Epoxy potted in an attractive molded case, Pin type, P.C. board mount, (min. 0.187" length)
- Rugged epoxy potted construction produces a completely sealed unit withstanding severe environmental conditions.
- In some models where no center tap is present (on the secondary), pin 5 is omitted.
- Secondary may be used as primary and primary as secondary.
- Will withstand soldering for 10 sec. @ 260 degrees C. ambient temp. 85 degrees C max.

Power level: 2.0W @ 300 Hz. to 50 Khz.
-Freq. range @ +0 dbm is 300 Hz. to 50 Khz. +/- 1.5db
-Freq. range @ +10 dbm is 300 Hz. to 50 Khz. +/- 1.5db
-Freq. range @ +27 dbm is 300 Hz. to 50 Khz. +/- 1.5db
-Freq. measurements with no D.C. saturation.

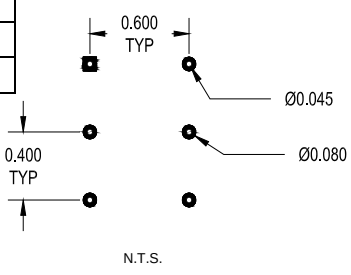


ELECTRICAL SPECIFICATIONS

Characteristic	Typical
Input Impedance	10KΩCT
Output Impedance	3.2 ΩCT
Output Power	2 Watts
DCR	
Primary 1-3	300.0 Ω (150.0Ω/150.0Ω)
Secondary 4-6	0.20 Ω (0.10Ω/0.10Ω)
Inductance	@ 300 Hz, 1.0 V OC
Primary	5.81 H
Secondary	2.146 mH
Leakage Inductance	23.00 mH
Impedance	@ 300 Hz, 1.0 V OC
Primary	11.69 KΩ
Secondary	4.28 Ω
Frequency Response	±1.5db from 300Hz to 50KHz
Unbalanced DC	0.75mA Max.
Turns ratio	55.3:1
Dielectric Strength	100 Vrms
Temperature Range	-40 To 105°C**

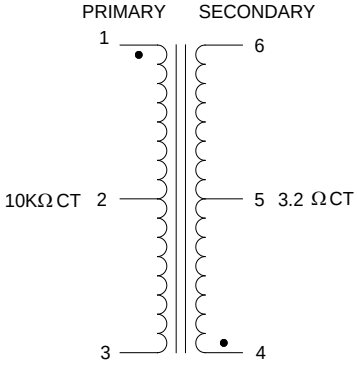


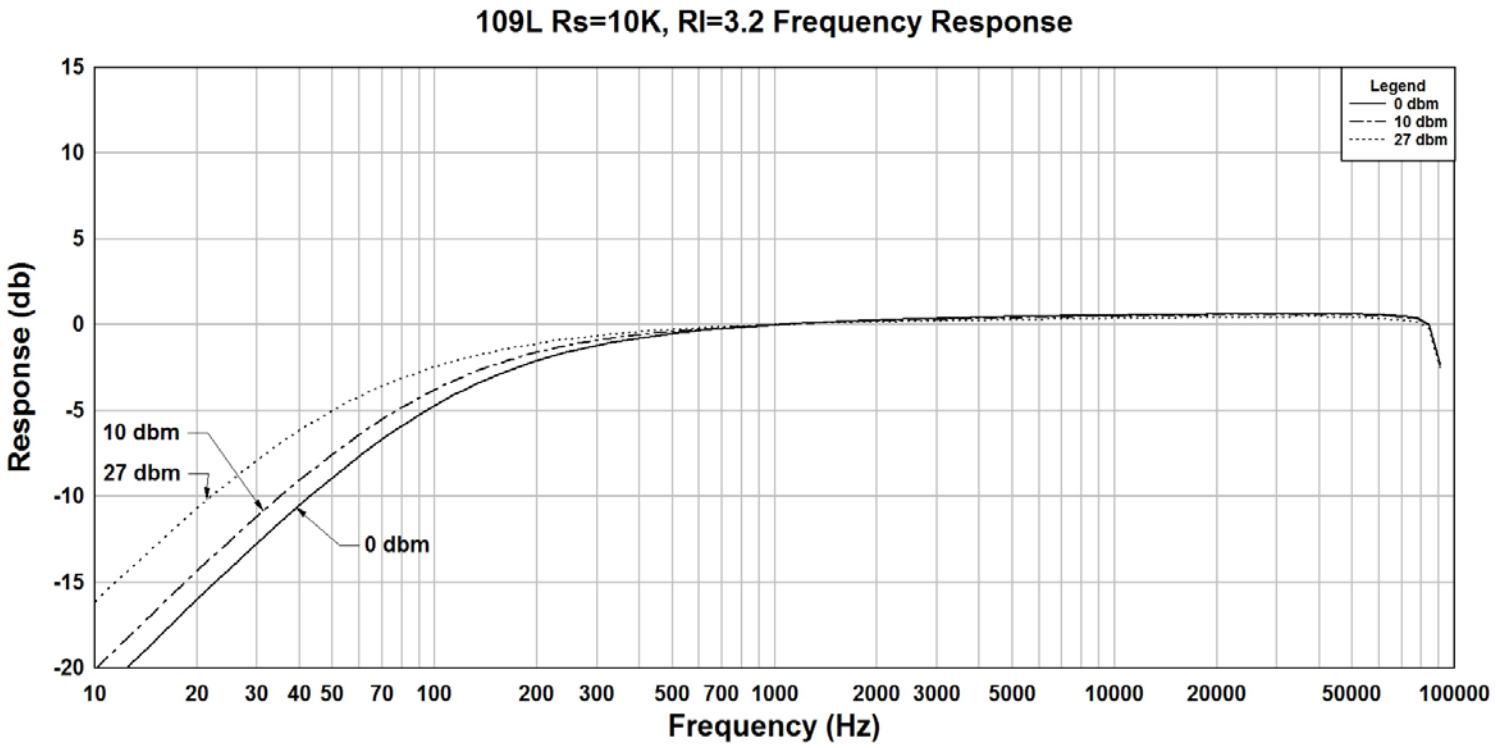
PCB LAYOUT

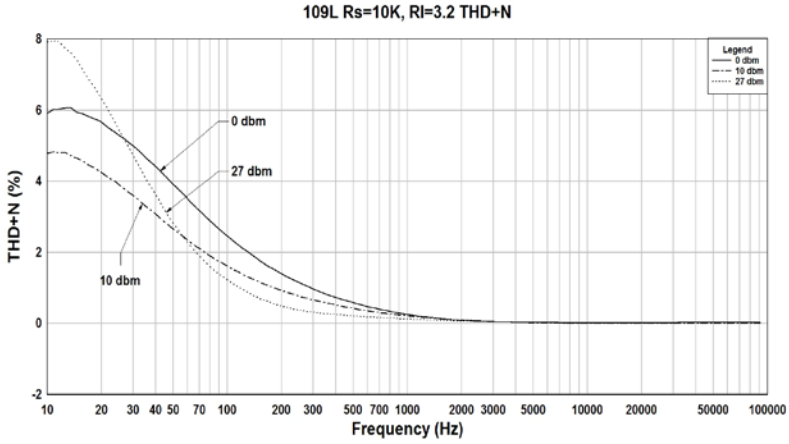


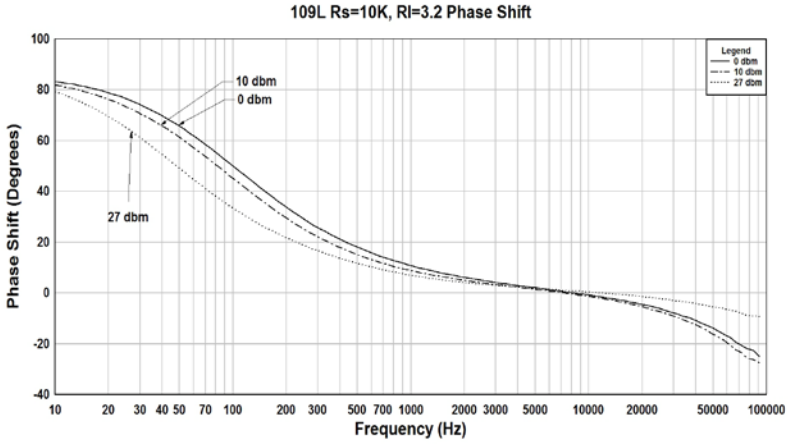
N.T.S.

SCHEMATIC DIAGRAM

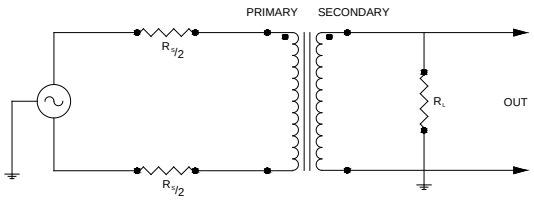








TYPICAL TEST CIRCUIT



Measurement instruments
Hp4192a impedance analyzer
Hp3456a DVM
Keithley 2002 DVM
D scope series iii audio analyzer

**The epoxy that is used to cast these parts has a workable temperature range of –40°C to +105°C
Under a normal rate of change, this does not include thermal shock.
Variations in the transformer materials and environmental conditions may reduce the workable temperature range.