

107N

MINIATURE EPOXY POTTED AUDIO TRANSFORMER

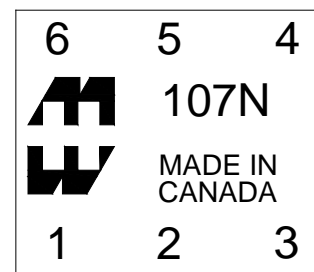
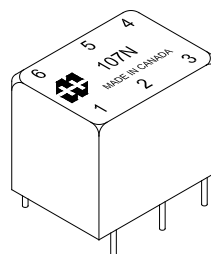
Audio input, line matching and output transformers
Epoxy potted in an attractive molded case, Pin type, P.C. board
mount, (min. 0.187" length)

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: 150mw @ 150 Hz. to 50 Khz.

-Freq. range @ +0 dbm is 150 Hz. to 80 Khz. +/- 1.5db

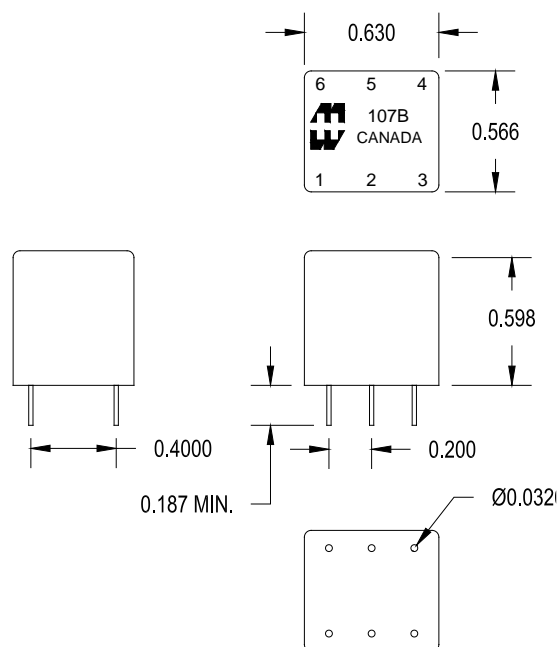
-Freq. range @ +10 dbm is 150 Hz. to 80 Khz. +/- 1.5db

-Freq. range @ +20 dbm is 150 Hz. to 80 Khz. +/- 1.5db

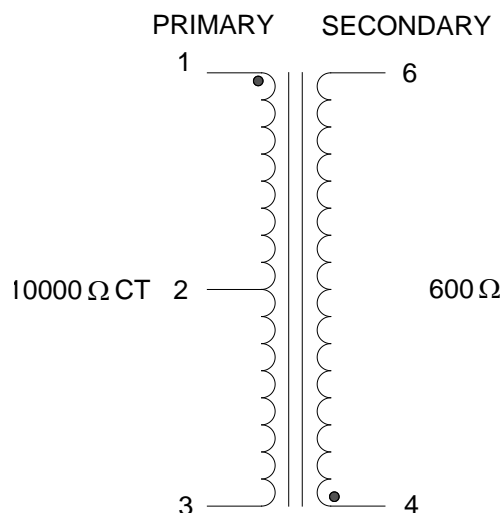
-Freq. measurements with no D.C. saturation.

ELECTRICAL SPECIFICATIONS

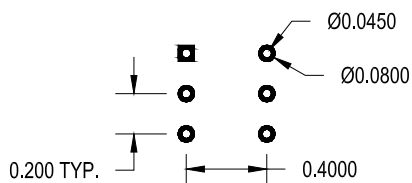
| Characteristic | Typical |
|---------------------|--|
| Input Impedance | 10000 Ω CT |
| Output Impedance | 600 Ω |
| Output Power | 0.150 Watts |
| DCR | |
| Primary 1-3 | 710 Ω (410 Ω /300 Ω) |
| Secondary 4-6 | 70 Ω (35 Ω /35 Ω) |
| Inductance | @ 1.0 kHz, 1.0 V OC |
| Primary | 5.89 Hy |
| Secondary | 0.388 Hy |
| | |
| Leakage Inductance | 7.0 mH |
| | |
| Impedance | @ 1.0 kHz, 1.0 V OC |
| Primary | 45.4 K Ω |
| Secondary | 3.15 K Ω |
| | |
| Frequency Response | ± 1.5 db from 300Hz to 50KHz |
| Turns ratio | 4.07:1 |
| | |
| Dielectric Strength | 100 Vrms |
| Temperature Range | -40 To 105°C** |



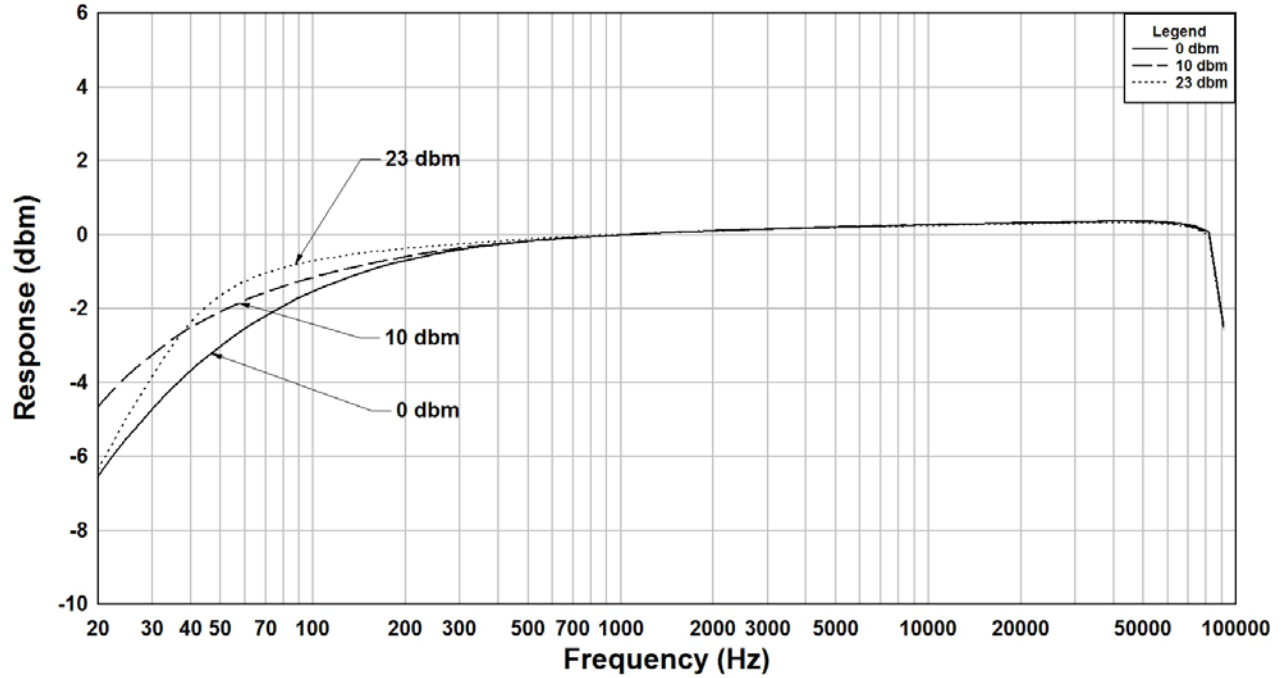
SCHEMATIC DIAGRAM



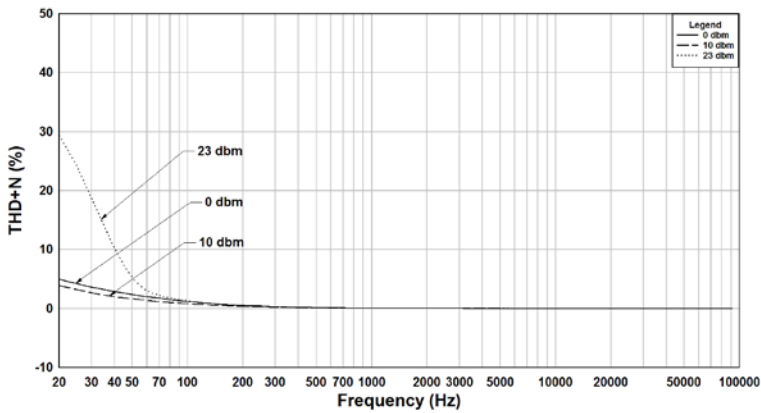
PCB LAYOUT



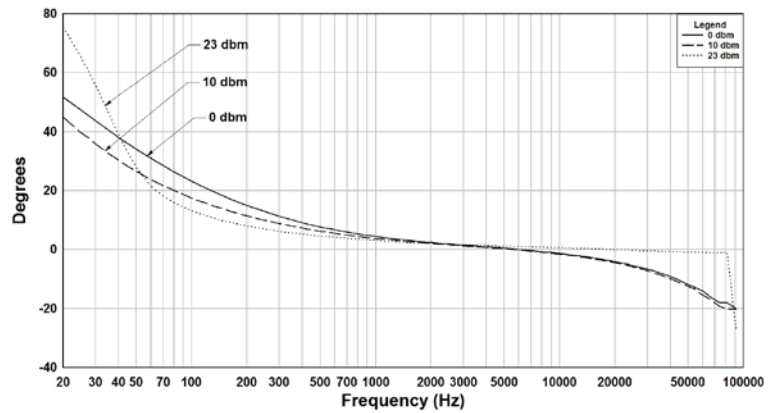
107N Rs=10K, RI=600 Frequency Response



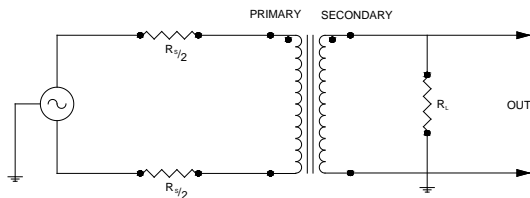
107N Rs=10K, RI=600 THD+N



107N Rs=10K, RI=600 Phase Shift



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 $+105^{\circ}\text{C}$. 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.

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