

108T

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 @ 300 Hz. to 50 KHz.

-Freq. range @ +0 dbm is 300 Hz. to 50 KHz. +/- 1.5db

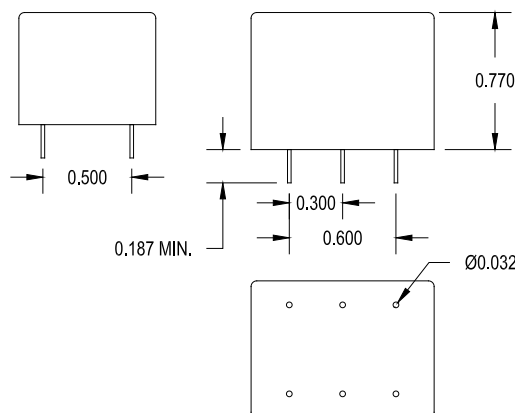
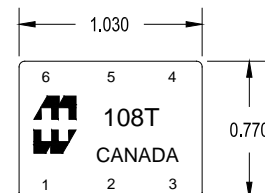
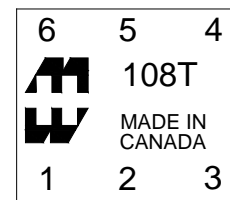
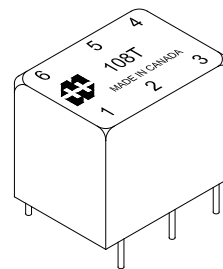
-Freq. range @ +10 dbm is 300 Hz. to 100 KHz. +/- 1.5db

-Freq. range @ +20 dbm is 300 Hz. to 100 KHz. +/- 1.5db

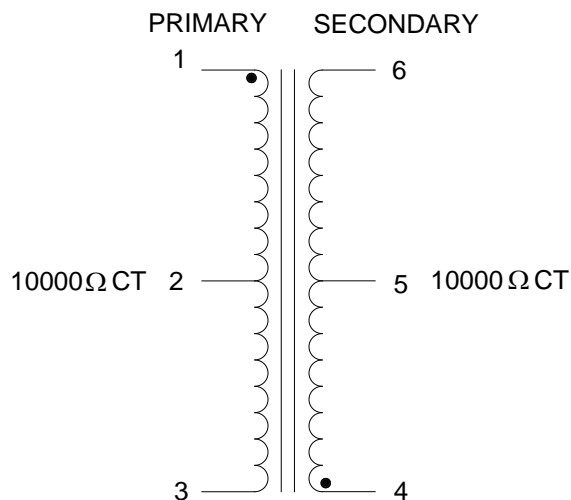
-Freq. measurements with no D.C. saturation.

ELECTRICAL SPECIFICATIONS

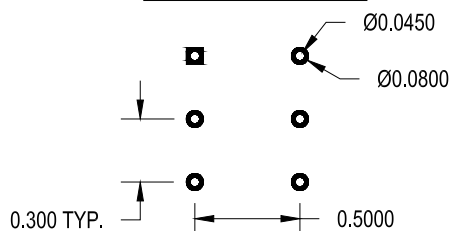
Characteristic	Typical
Input Impedance	10000 ΩCT
Output Impedance	10000 ΩCT
Output Power	0.500 Watts
DCR	
Primary 1-3	424Ω (172Ω/252Ω)
Secondary 6-8	426Ω (213Ω/213Ω)
Inductance	@ 1.0 kHz, 1.0 V OC
Primary	11.7 H
Secondary	11.8 H
Leakage Inductance	2.3 H
Impedance	@ 1.0 kHz, 1.0 V OC
Primary	30.9 KΩ
Secondary	29.9 KΩ
Frequency Response	±1.5db from 300Hz to 50KHz
Turns ratio	1:1
Dielectric Strength	500 Vrms
Temperature Range	-40 To 105°C**



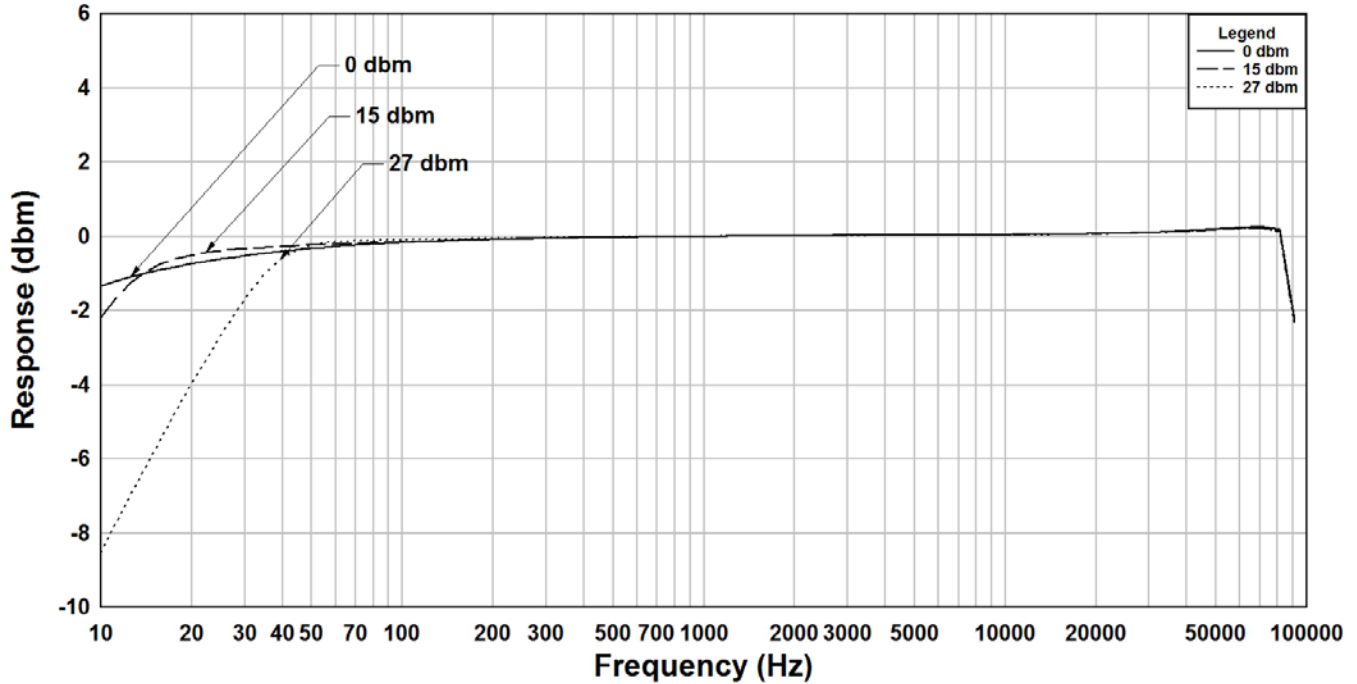
SCHEMATIC DIAGRAM



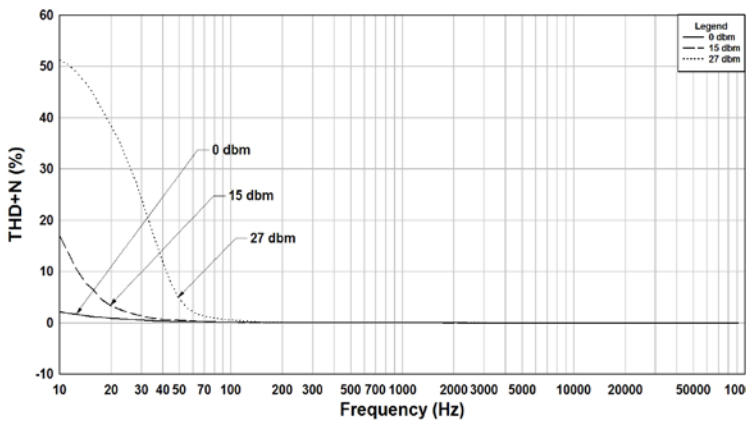
PCB LAYOUT



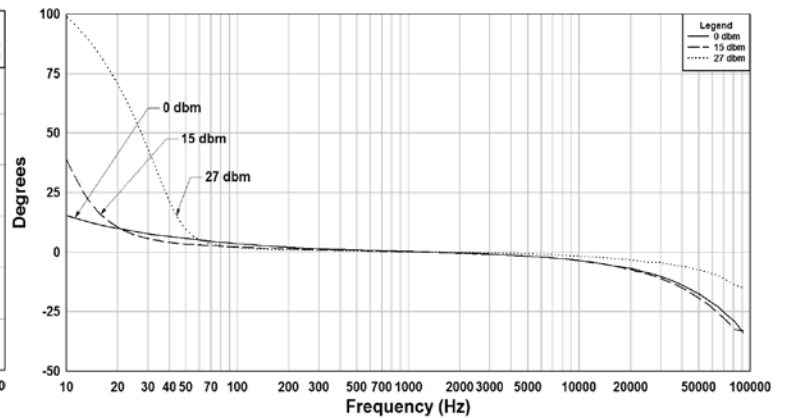
108T Rs=10K, RI=10K Frequency Response



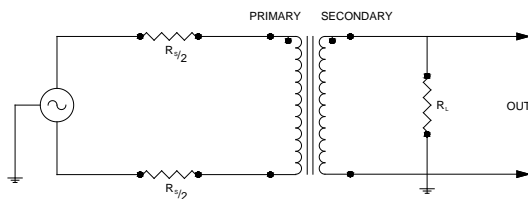
108T Rs=10K, RI=10K THD+N



108T Rs=10K, RI=10K 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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