

107E

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.

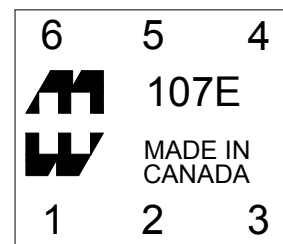
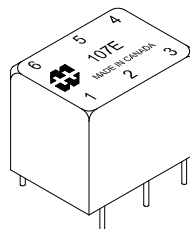
Power level: 150mw @ 150 Hz. to 50 Khz.

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

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

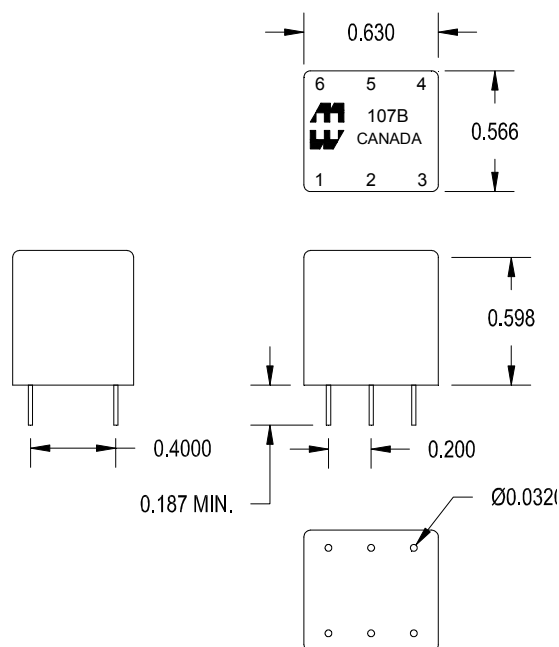
-Freq. range @ +20 dbm is 150 Hz. to 80 Khz. +/- 1.5db

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

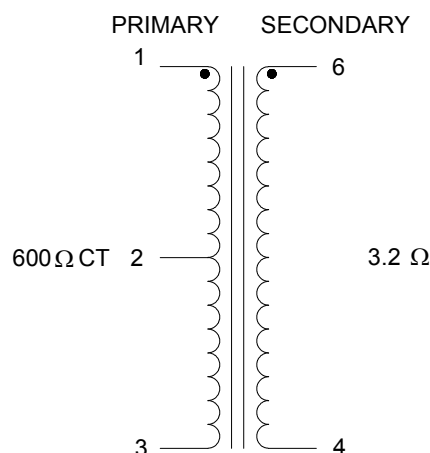


ELECTRICAL SPECIFICATIONS

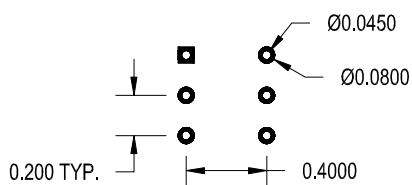
Characteristic	Typical
Input Impedance	600 Ω CT
Output Impedance	3.2 Ω
Output Power	0.150 Watts
DCR	
Primary 1-3	60 Ω (30Ω/30Ω)
Secondary 4-6	0.60 Ω
Inductance @ 1.0 kHz, 1.0 V OC	
Primary	500 mH
Secondary	3.25 mH
Leakage Inductance	1.65 mH
Impedance @ 1.0 kHz, 1.0 V OC	
Primary	4.25 KΩ
Secondary	37.3 Ω
Frequency Response	±1.5db from 300Hz to 50KHz
Turns ratio	13.68:1
Dielectric Strength	100 Vrms
Temperature Range	-40 To 105°C**



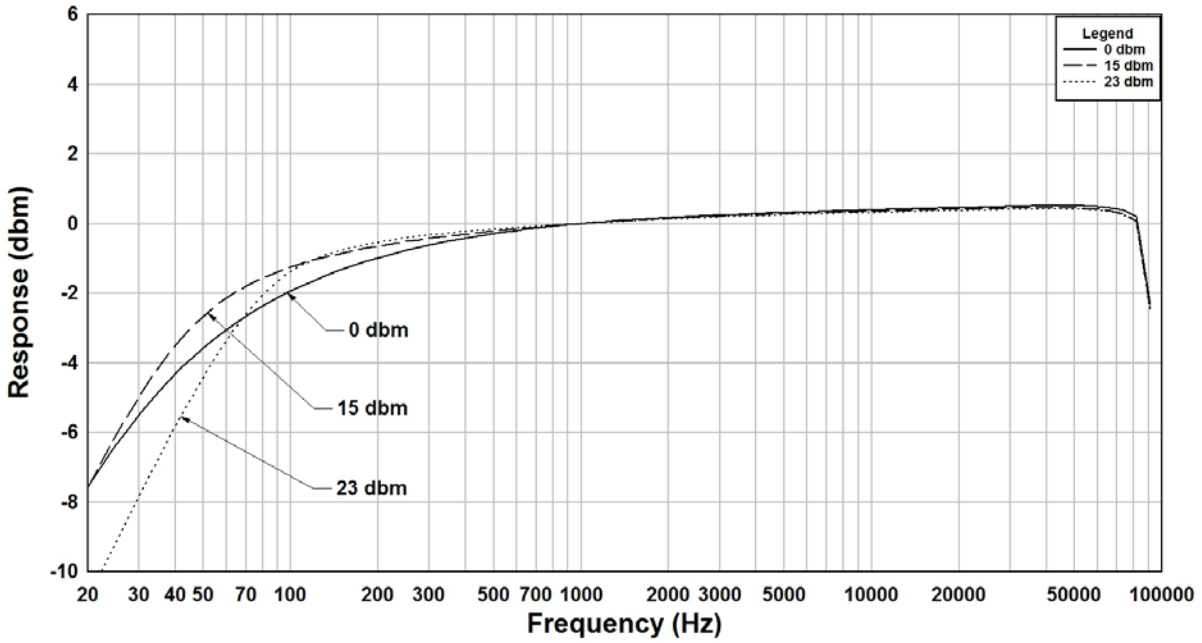
SCHEMATIC DIAGRAM



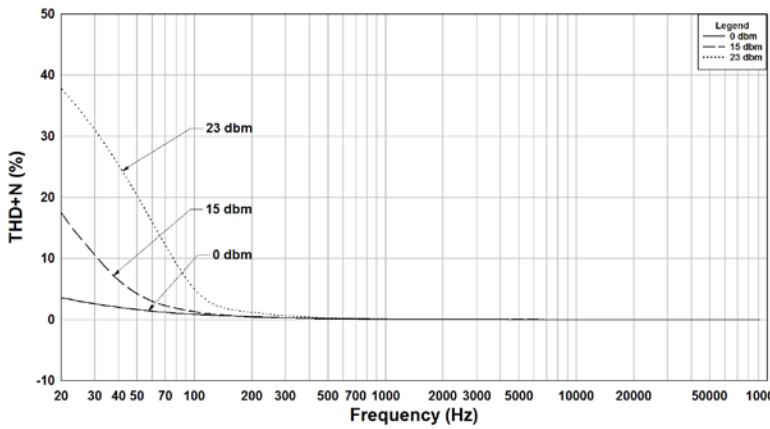
PCB LAYOUT



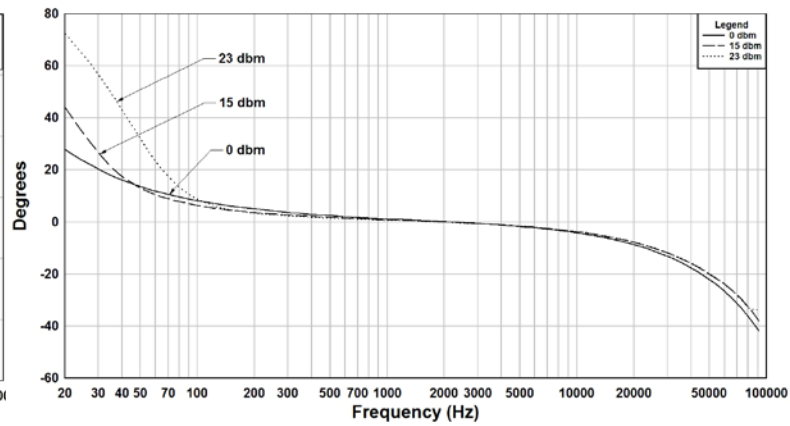
107E Rs=600 RI=3.2 Frequency Response



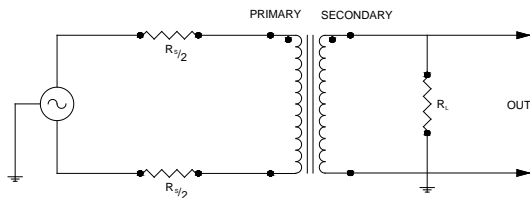
107E Rs=600 RI=3.2 THD+N



107E Rs=600 RI=3.2 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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