

# 107X

#### 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.

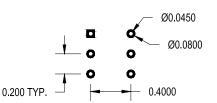


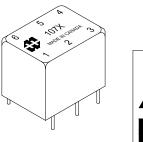
- -Freq. range @ +0 dbm is 150 Hz. to 80 Khz. +/- 1.5db
- -Freq. range @ +10 dbm is 150 Hz. to 80 Khz. +/- 1.5db
- -Freq. range @ +20 dbm is 150 Hz. to 80 Khz. +/- 1.5db
- -Freq. measurements with no D.C. saturation.

## **ELECTRICAL SPECIFICATIONS**

Characteristic	<u>Typical</u>
Input Impedance	100000 ΩCT
Output Impedance	1000 ΩCT
Output Power	0.150 Watts
DCR	
Primary 1-3	3.66KΩ ( $2.15$ KΩ/ $1.51$ KΩ)
Secondary 4-6	75 $\Omega$ (37.5 $\Omega$ /37.5 $\Omega$ )
Inductance	@ 1.0 kHz, 1.0 V OC
Primary	56.7 Hy
Secondary	0.83 Hy
Impedance	@ 1.0 kHz, 1.0 V OC
Primary	300 KΩ
Secondary	3.90 KΩ
Frequency Response	$\pm$ 1.5db from 300Hz to 50KHz
Turns ratio	10:1
Dielectric Strength	500 Vrms
Temperature Range	-40 To 105°C**

### **PCB LAYOUT**

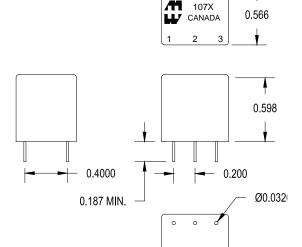




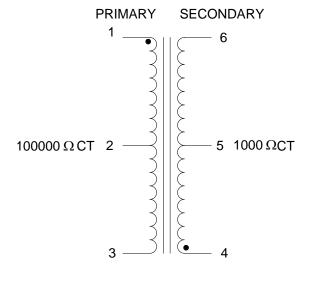


0.630

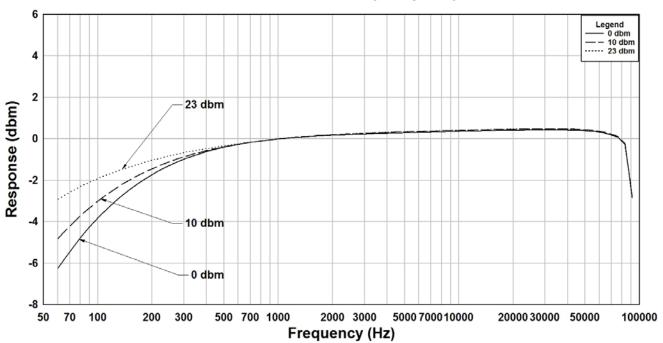
6 5

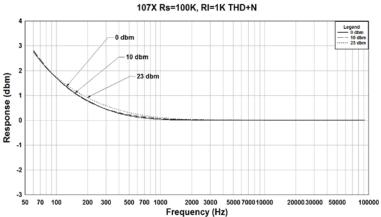


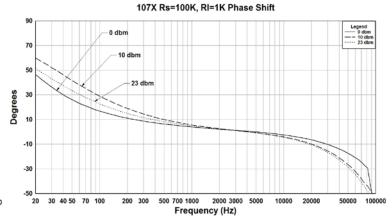
#### SCHEMATIC DIAGRAM



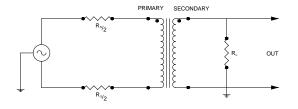
## 107X Rs=100K, RI=1K Frequency Response







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.

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