



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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109E

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.

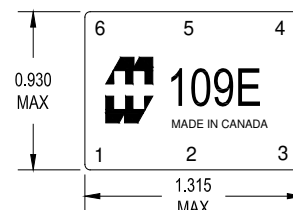
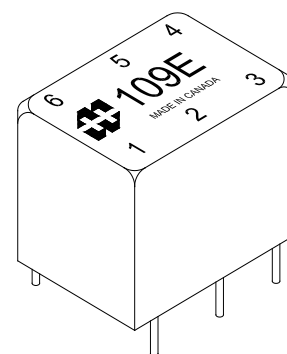
Power level: 2.0W @ 300 Hz. to 50 KHz.

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

-Freq. range @ +10 dbm is 300 Hz. to 50 KHz. +/- 1.5db

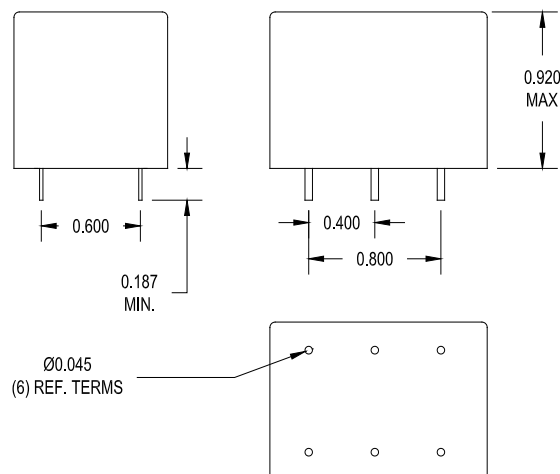
-Freq. range @ +27 dbm is 300 Hz. to 50 KHz. +/- 1.5db

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

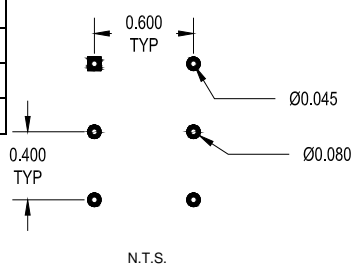


ELECTRICAL SPECIFICATIONS

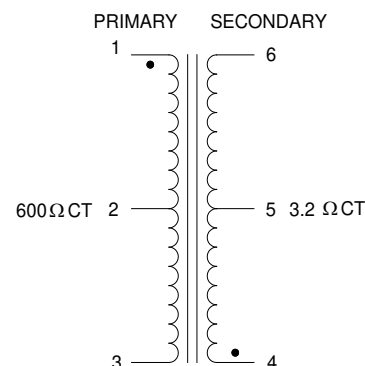
Characteristic	Typical
Input Impedance	600 ΩCT
Output Impedance	3.2 Ω
Output Power	2 Watts
DCR	
Primary 1-3	40 Ω (20Ω/20Ω)
Secondary 4-6	0.27 Ω (0.135Ω/0.135Ω)
Inductance @ 1.0 kHz, 1.0 V OC	
Primary	0.48 H
Secondary	2.66 mH
Leakage Inductance	3.58 mH
Impedance @ 1.0 kHz, 1.0 V OC	
Primary	3.16 KΩ
Secondary	17.5 Ω
Frequency Response	±1.5db from 300Hz to 50KHz
Unbalanced DC	6mA Max.
Turns ratio	6.88:1
Dielectric Strength	100 Vrms
Temperature Range	-40 To 105°C**



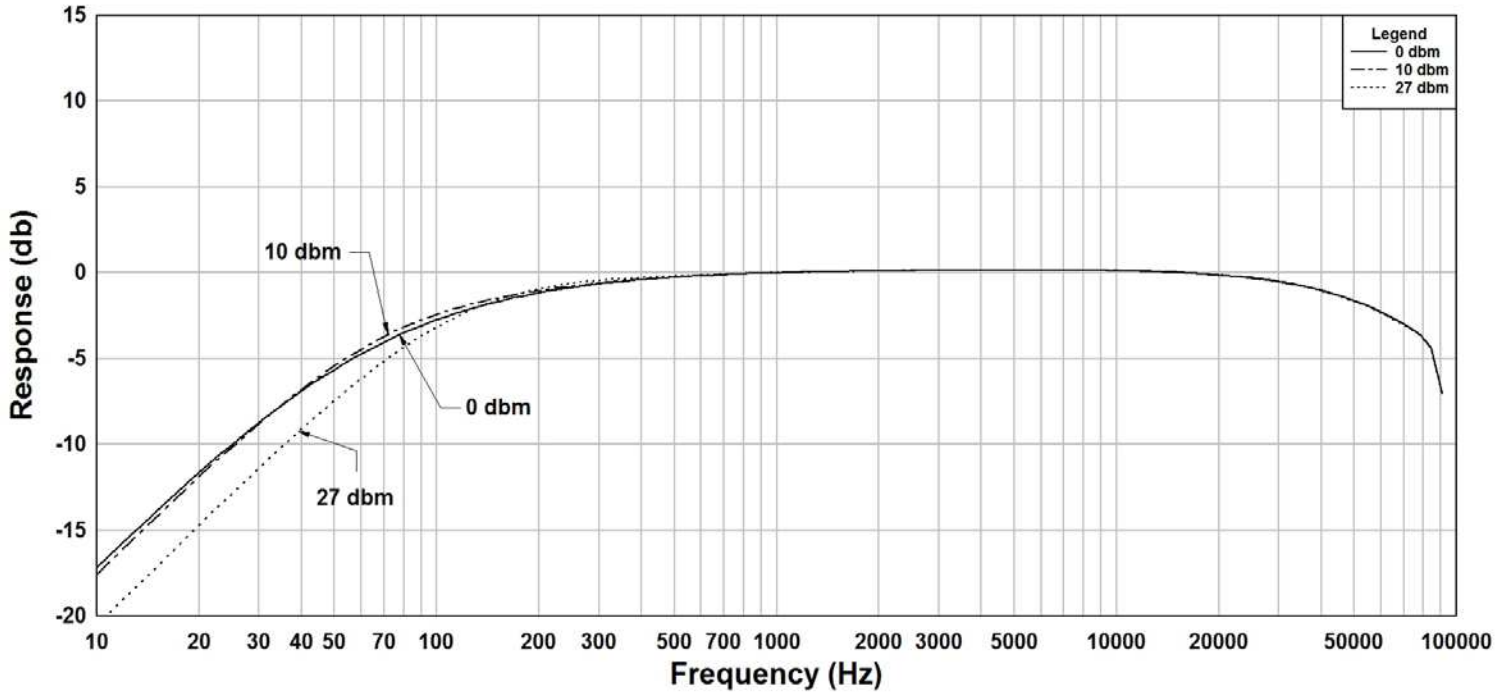
PCB LAYOUT



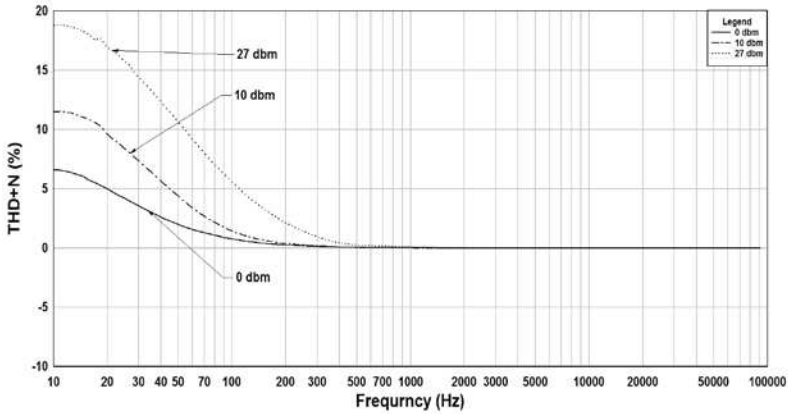
SCHMATIC DIAGRAM



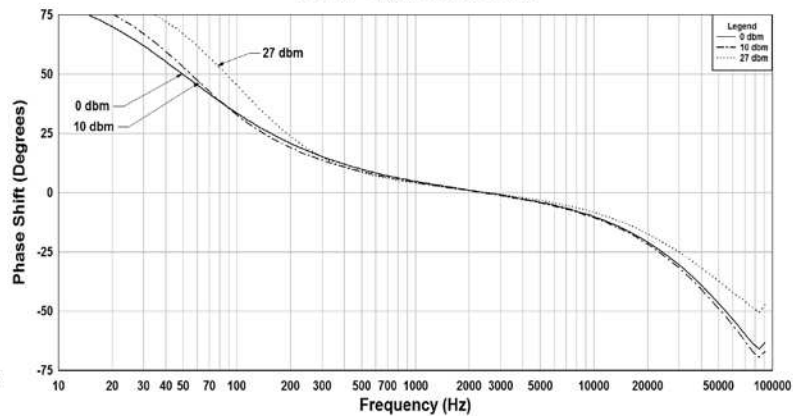
109E Rs=600, RI=3.2 Frequency Response



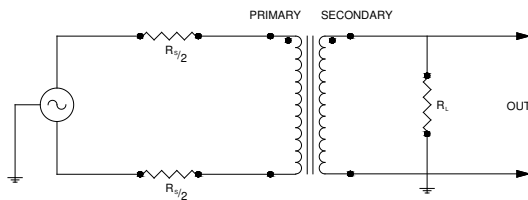
109E Rs=600, RI=3.2 THD+N



109E 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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