



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# 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.

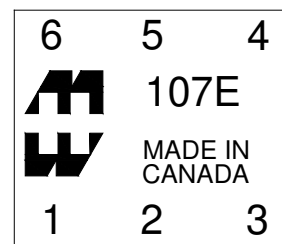
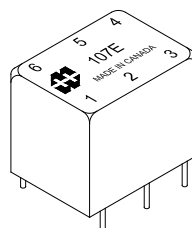
Power level: 150mw @ 150 Hz. to 50 Khz.

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

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

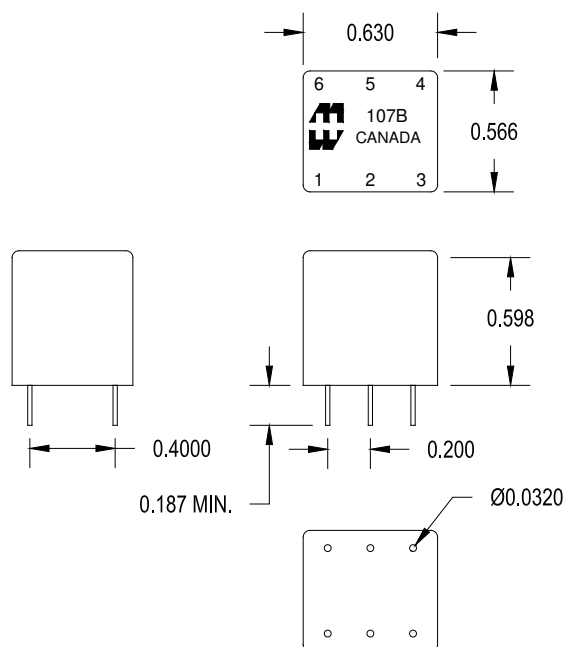
-Freq. range @ +20 dbm is 150 Hz. to 80 Khz. +/- 1.5db

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

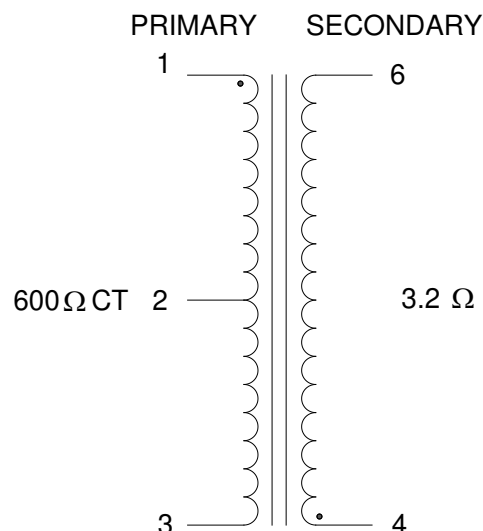


## ELECTRICAL SPECIFICATIONS

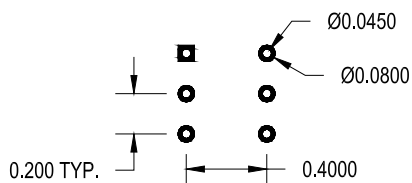
Characteristic	Typical
Input Impedance	600 $\Omega$ CT
Output Impedance	3.2 $\Omega$
Output Power	0.150 Watts
DCR	
Primary 1-3	60 $\Omega$ (30 $\Omega$ /30 $\Omega$ )
Secondary 4-6	0.60 $\Omega$
Inductance	@ 1.0 kHz, 1.0 V OC
Primary	500 mH
Secondary	3.25 mH
Leakage Inductance	1.65 mH
Impedance	@ 1.0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



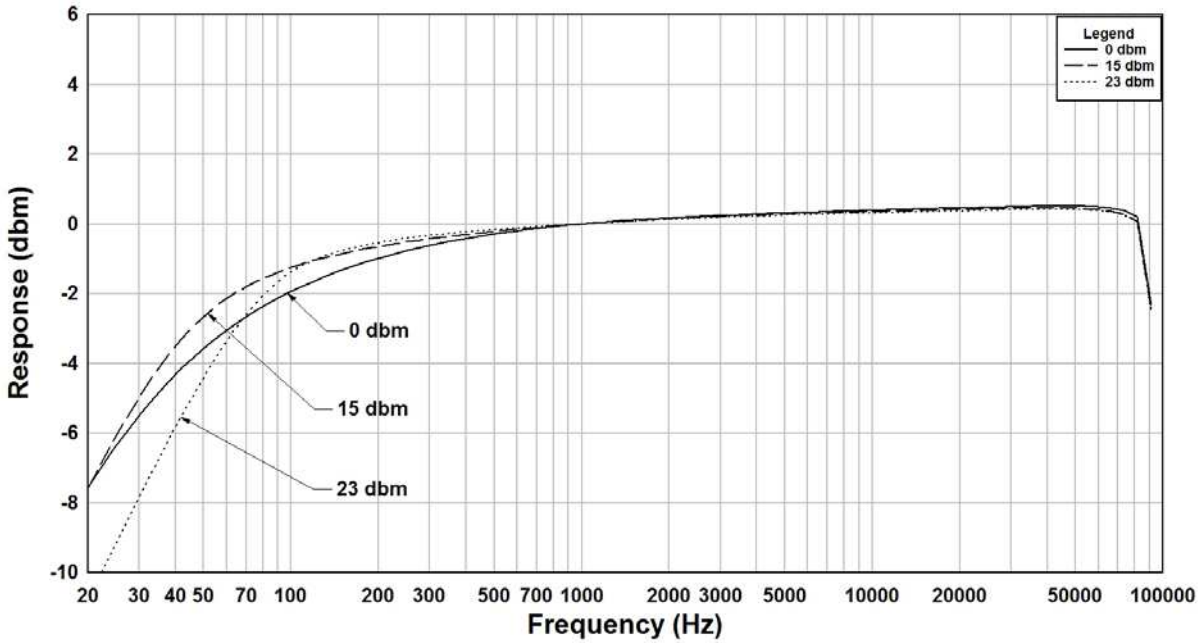
## SCHEMATIC DIAGRAM



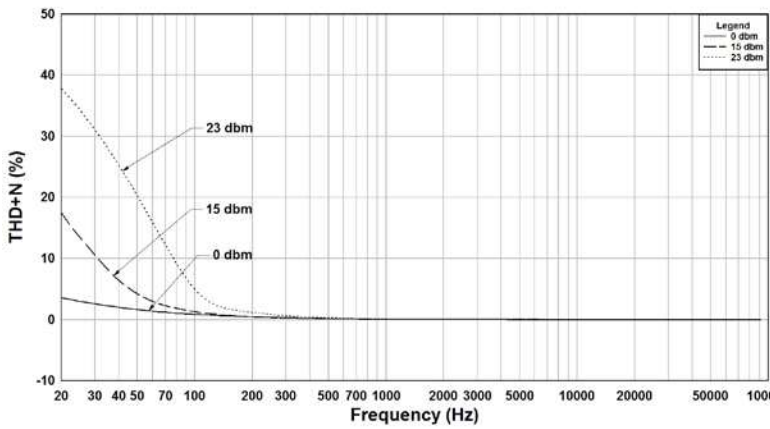
## PCB LAYOUT



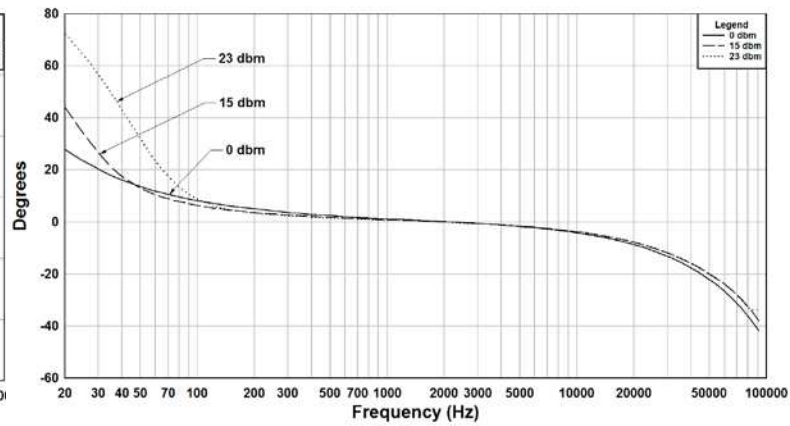
### 107E Rs=600 RI=3.2 Frequency Response



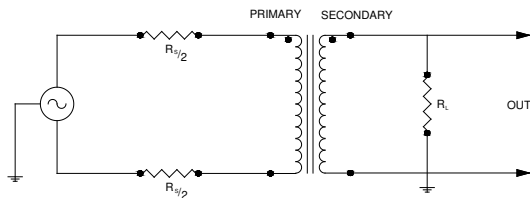
### 107E Rs=600 RI=3.2 THD+N



### 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  $-40^{\circ}\text{C}$  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.

This drawing and the information in it is the property of Hammond Manufacturing. It may not be reproduced, transmitted or used in any manner whatsoever without the written permission of Hammond Manufacturing. Data subject to change without notice.