

# 117E16

## 70 V LINE AUDIO TRANSFORMER

- Couple 3.2ohm speakers to 70volt line outputs of amplifiers.
- Up to 5 power tap levels available
- Primary taps marked in watts (no calculation necessary), to match speaker power.
- Frequency response 100Hz to 9Khz ( $\pm 1$ dB reference @1 KHz)
- Distortion is less than 2.0% @ 100 Hz. at maximum power.
- All models have solder lugs, also suitable for slip on jumper connections.
- Total power requirements of speakers should not exceed the rated power of each transformer or rated power of the amplifier.

### ELECTRICAL SPECIFICATIONS

Characteristics	Typical
System Voltage	70V
Power Rating	16 Watts
Insertion Loss	<2dB
<b>DCR</b>	
COM - 1 W	81.6 $\Omega$ TYP
Input	0.26 $\Omega$ TYP
<b>INDUCTANCE/IMPEDANCE</b>	
	@1.0 KHZ, 1V OC
COM - 1W	4.78H / 28.0K $\Omega$
COM - 2W	2.51H / 14.55K $\Omega$
COM - 4W	1.35H / 7.64K $\Omega$
COM - 8W	743.5mH / 4.05K $\Omega$
COM - 16W	419.2mH / 2.17K $\Omega$
Input	9.39mH / 32.78 $\Omega$
<b>LEAKAGE INDUCTANCE</b>	
	@1.0 KHZ, 1V SC
1W/ 16W	158.80mH / 34.02mH
Dielectric Strength	1500VRMS
Temperature Range	-40 To 105°C

### TEST CONDITIONS

Measurement instruments:

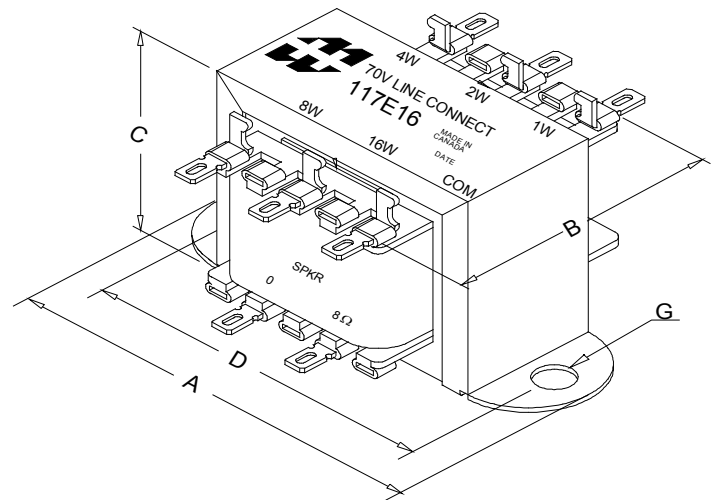
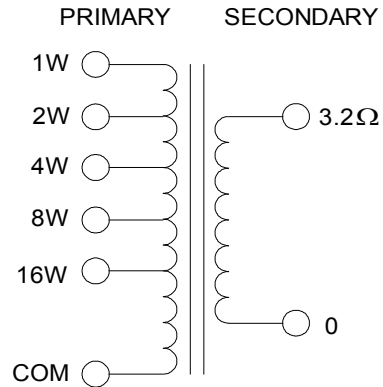
D scope series iii audio analyzer  
Wayne Kerr 3255B with a 3265B

Keithley 2010 DVM

Hp4192a impedance analyzer

\* All graphs input level 27dBm @1.0KHz reference.

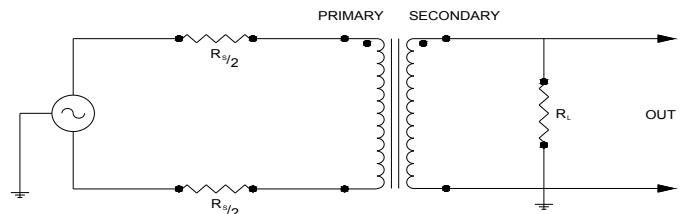
\*\*The results are typical and are subject to normal manufacturing and electrical tolerances.



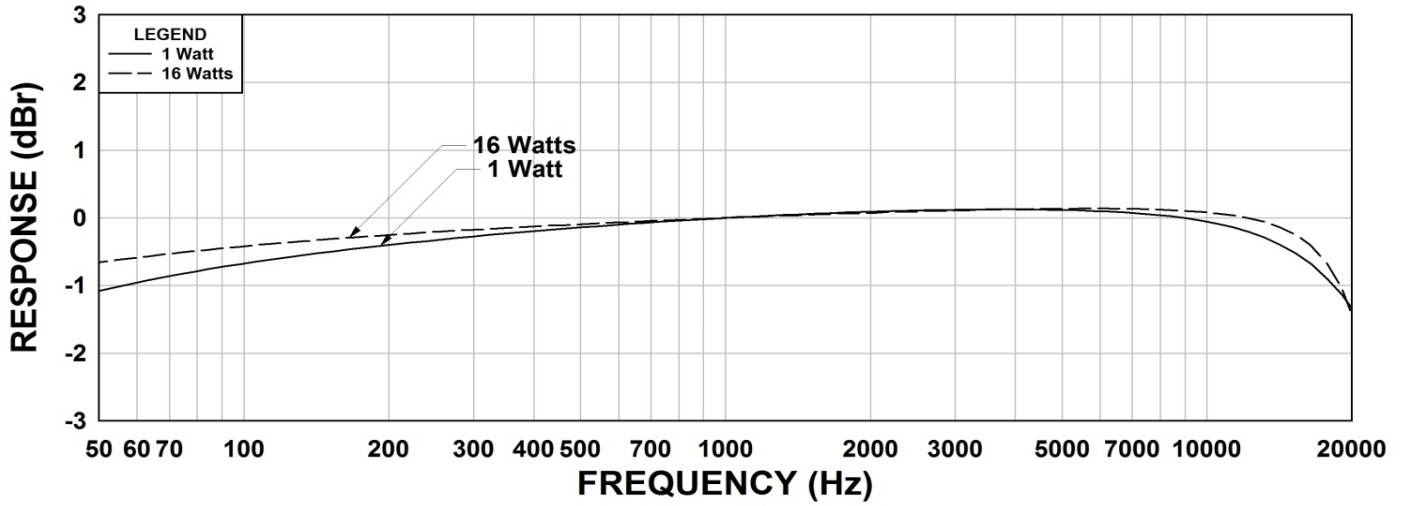
### Dimensions

A	3.688" $\pm 0.063$	D	3.125" $\pm 0.063$
B	1.945" REF	G	0.187" $\pm 0.015$
C	2.310 MAX		

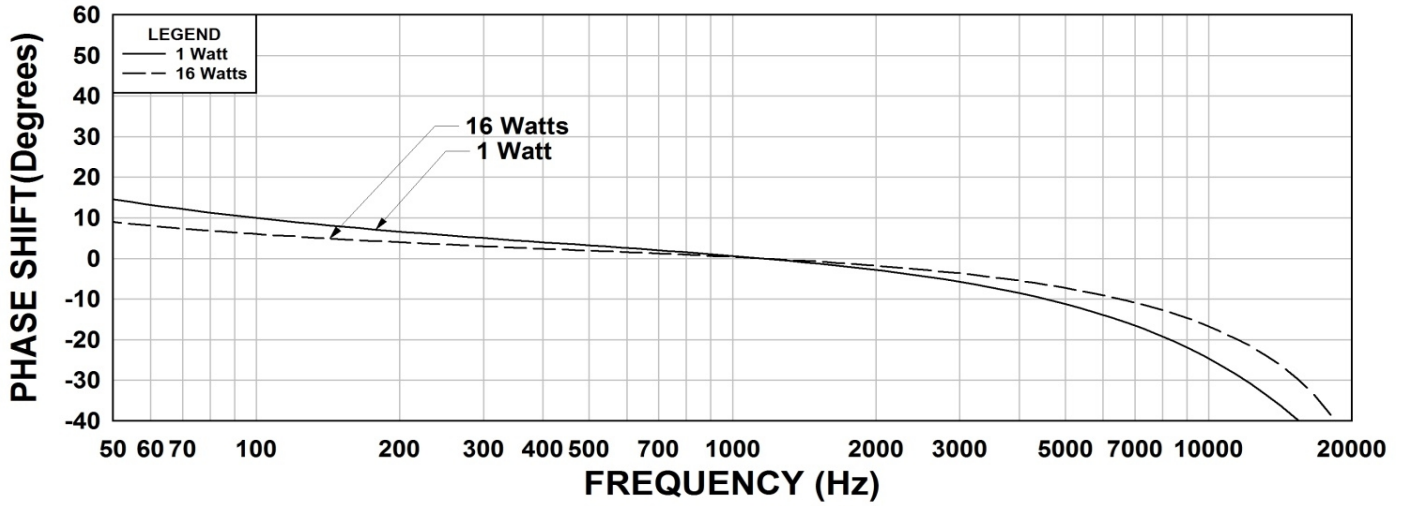
### TYPICAL TEST CIRCUIT



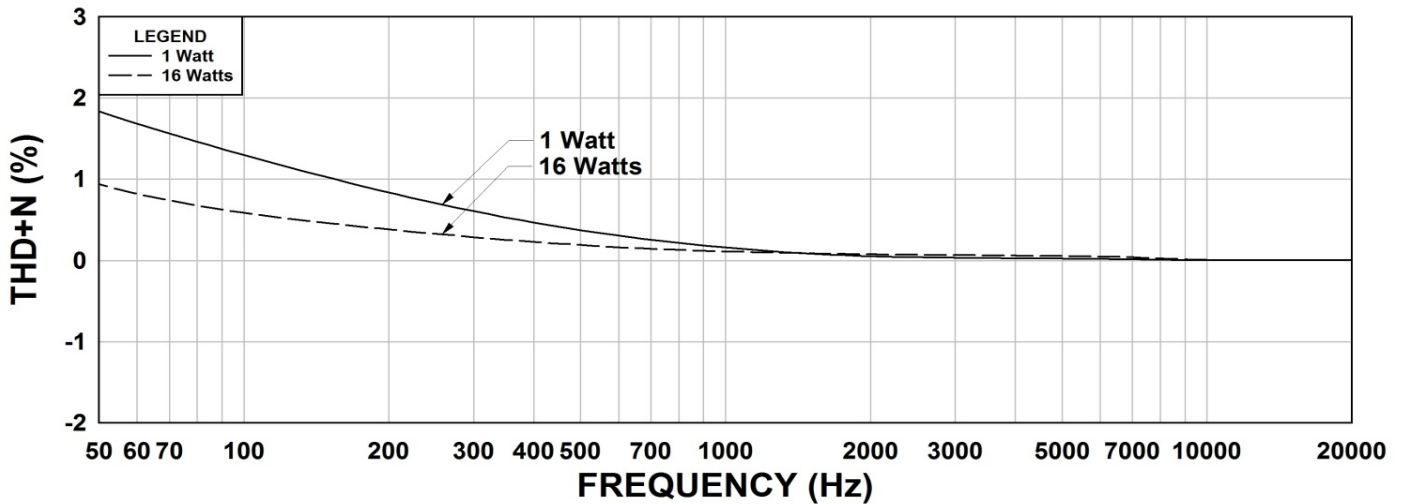
### 117E16 Frequency Response 1W & 16W



### 117E16 Phase Shift 1W & 16W



### 117E16 THD+N 1W & 16W



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