

# 117K4

## 25 V LINE AUDIO TRANSFORMER

- Couple 8ohm speakers to 25volt 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 10Khz. ( $\pm 1$  dB reference @1 KHz.)
- Distortion is less than 1% @ 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              | 25V                      |
| Power Rating                | 4 Watts                  |
| Insertion Loss              | <2dB                     |
| <b>DCR</b>                  |                          |
| COM - $\frac{1}{4}$ W       | 48.9 $\Omega$ TYP        |
| Input                       | 0.40 $\Omega$ TYP        |
| <b>INDUCTANCE/IMPEDANCE</b> |                          |
|                             | @1.0 KHz, 1V OC          |
| COM - $\frac{1}{4}$ W       | 1.03H / 5.75K $\Omega$   |
| COM - $\frac{1}{2}$ W       | 582.0mH / 3.10K $\Omega$ |
| COM-1W                      | 334.2mH / 1.69K $\Omega$ |
| COM-2W                      | 185.1mH / 897 $\Omega$   |
| COM-4W                      | 106.8mH / 492.4 $\Omega$ |
| Input                       | 6.74mH / 29.11 $\Omega$  |
| <b>LEAKAGE INDUCTANCE</b>   |                          |
|                             | @1.0 KHz, 1V SC          |
| $\frac{1}{4}$ W/ 4W         | 78.20mH / 20.64mH        |
| Dielectric Strength         | 500VRMS                  |
| Temperature Range           | -40 To 105°C             |

## TEST CONDITIONS

Measurement instruments:

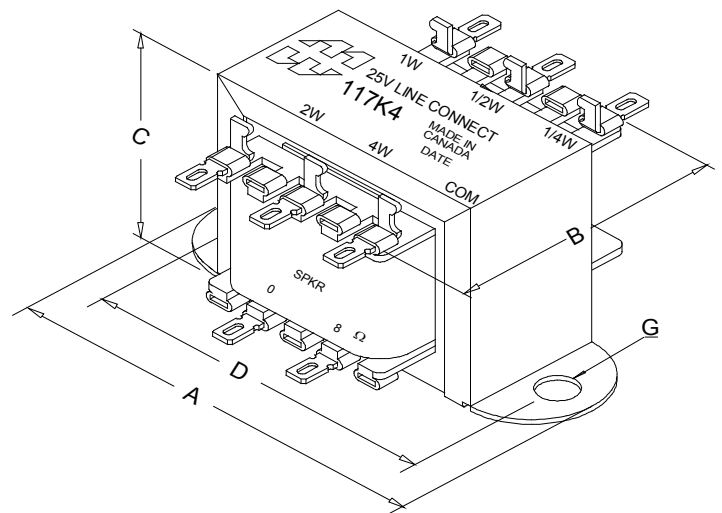
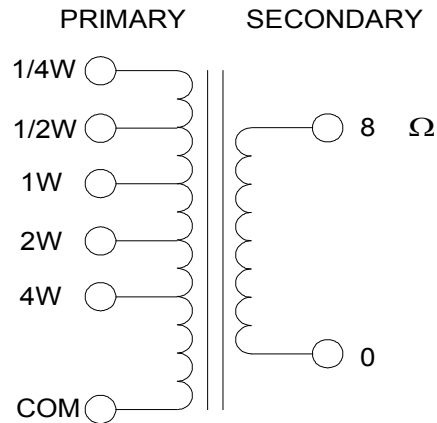
D scope series iii audio analyzer  
Wayne Kerr 3255B with a 3265B

Keithley 2010 DVM

Hp4192a impedance analyzer

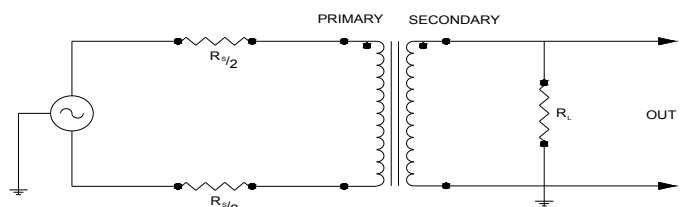
\* All graphs input level 27dBm @1.0KHz reference.

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

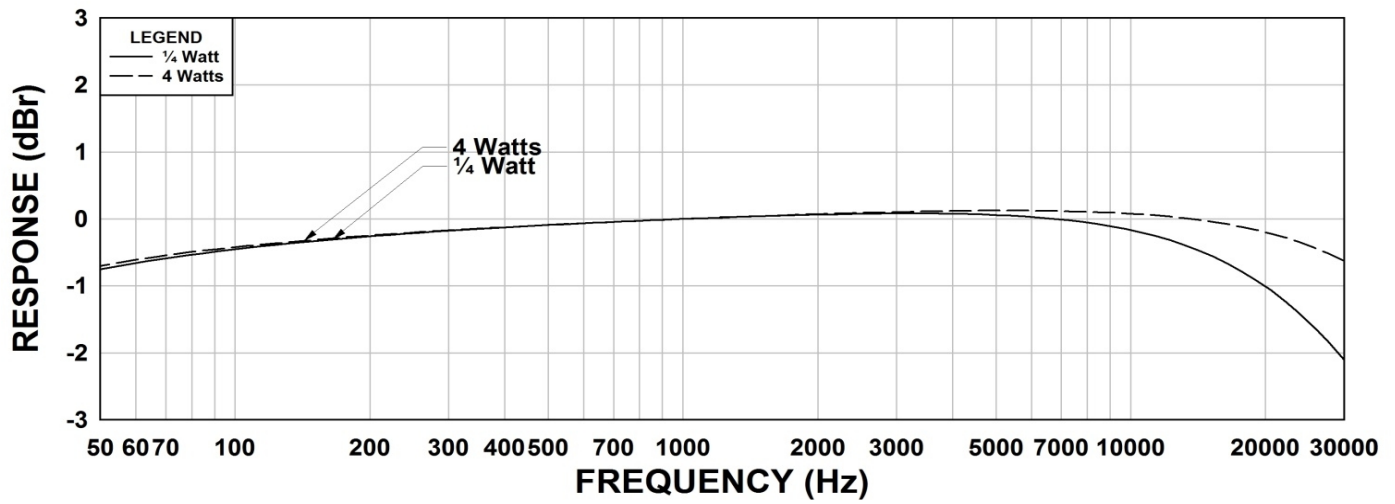


| Dimensions |                   |   |                    |
|------------|-------------------|---|--------------------|
| A          | 2.81" $\pm 0.063$ | D | 2.38" $\pm 0.063$  |
| B          | 1.50" REF.        | G | 0.187" $\pm 0.015$ |
| C          | 1.69" MAX.        |   |                    |

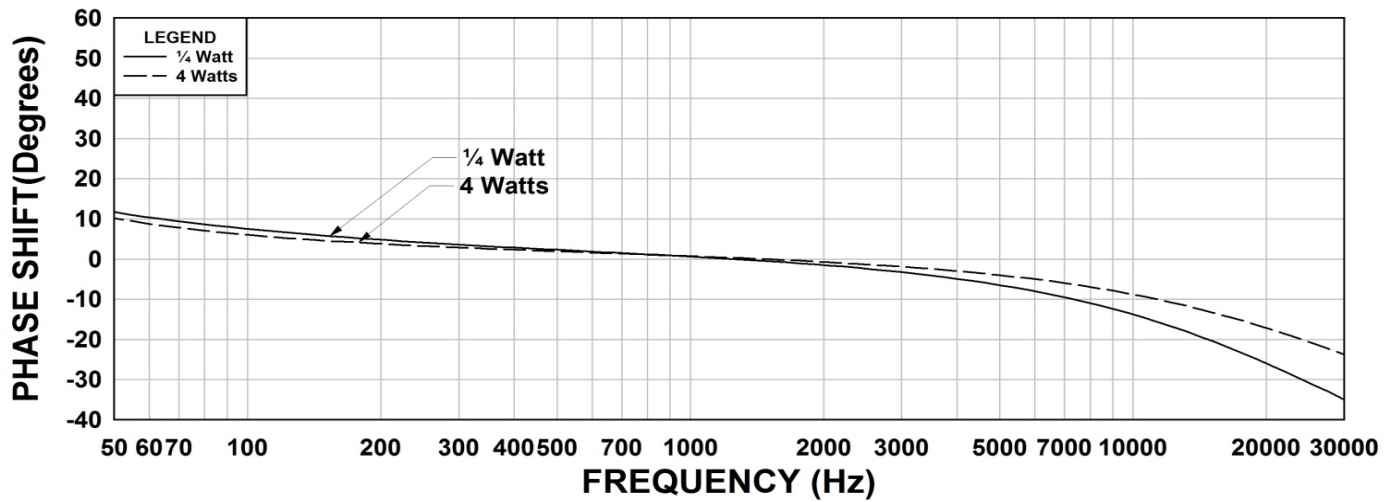
## TYPICAL TEST CIRCUIT



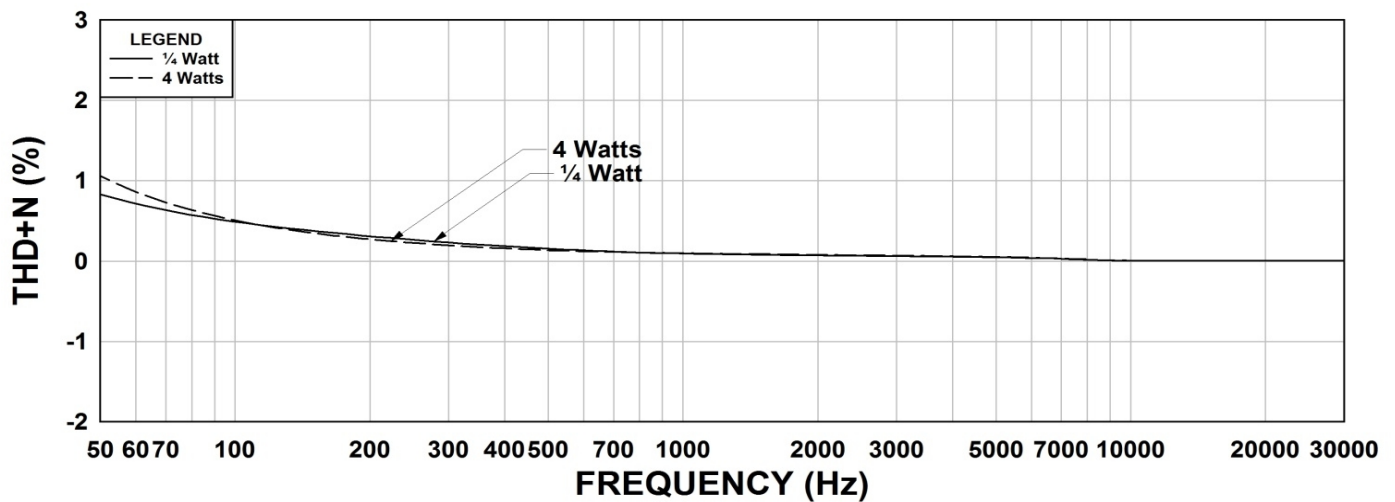
### 117K4 Frequency Response ¼W & 4W



### 117K4 Phase Shift ¼W & 4W



### 117K4 THD+N ¼W & 4W



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