Hammond Mfg. Co. Ltd., Electronics Division

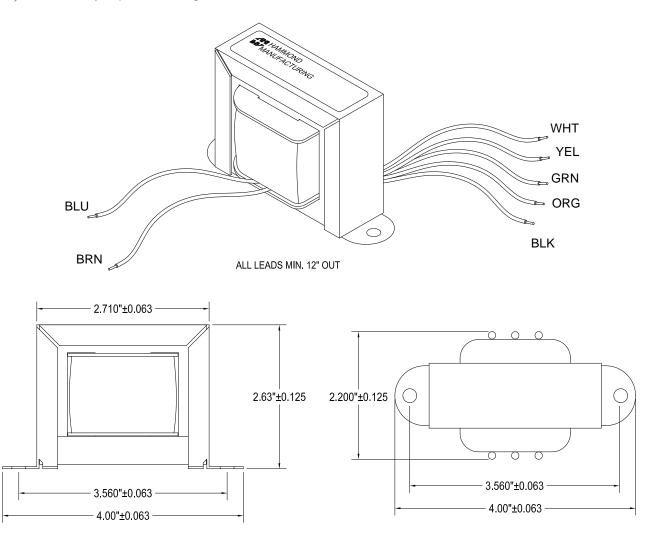


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# 125DSE

#### UNIVERSAL SINGLE ENDED TUBE OUTPUT TRANSFORMER

- Designed for general purpose or replacement use (not Hi-Fi), in single ended, tube output circuits.
- Frequency response: 100 Hz. 15 Khz at full rated power (see graphs for detailed response).
- For full frequency response (20 Hz. to 20 Khz.) see our 1627-1642 Series.
- For push-pull output use, see our 125 Series.
- Open style with minimum 12" long primary & secondary leads.
- All sizes use butt stacked cores (using 29M6 steel) with an air gap, to reduce D.C. core saturation.
- Primary impedance range from 2,500 to 10,000 Ohms.
- Secondary impedance range from 4 to 32 Ohms.

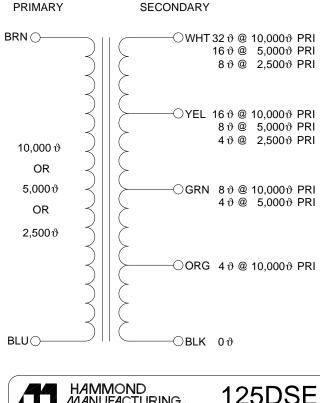


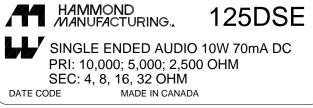
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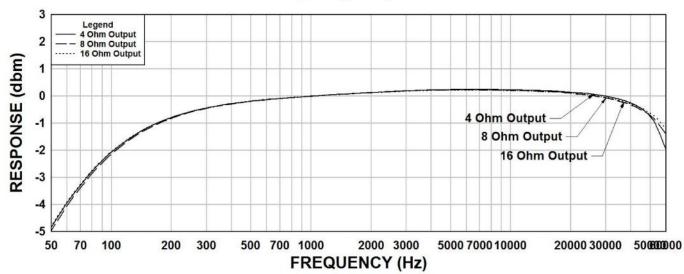
## **ELECTRICAL SPECIFICATIONS**\*\*

<b>Characteristic</b>	Typical
Input Impedance	2500 - 10000 <del></del>
Output Impedance	4/8/16/32 එ
Output Power	10 Watts
Max. DC Bias	70 mA
Primary - DCR	
Blue – Brown	126.5 ϑ
Secondary DCR	
Black – Orange	238 mϑ
Black – Green	315 mϑ
Black – Yellow	438 mϑ
Black – White	600 mϑ
Inductance	@ 1.0 kHz, 1.0 V OC
Primary – Blue – Brown	4.48 Hy
Sec – Black – Orange	3.48 mH
Sec – Black – Green	6.65 mH
Sec – Black – Yellow	14.0 mH
Sec – Black – White	27.4 mH
Impedance	@ 1.0 kHz, 1.0 V OC
Primary – Blue – Brown	28.3 Kϑ
Sec – Black – Orange	21.8 ϑ
Sec – Black – Green	44.3 <b></b>
Sec – Black – Yellow	92.0 ϑ
Sec – Black – White	180.0 ϑ
	See graphs for specific
	response, Typ. { 1.0db from
Frequency Response	100Hz to 15KHz
Dielectric Strength	1500Vrms
Temperature Range	-40 To 105 C

### Schematic and Hook Up Data

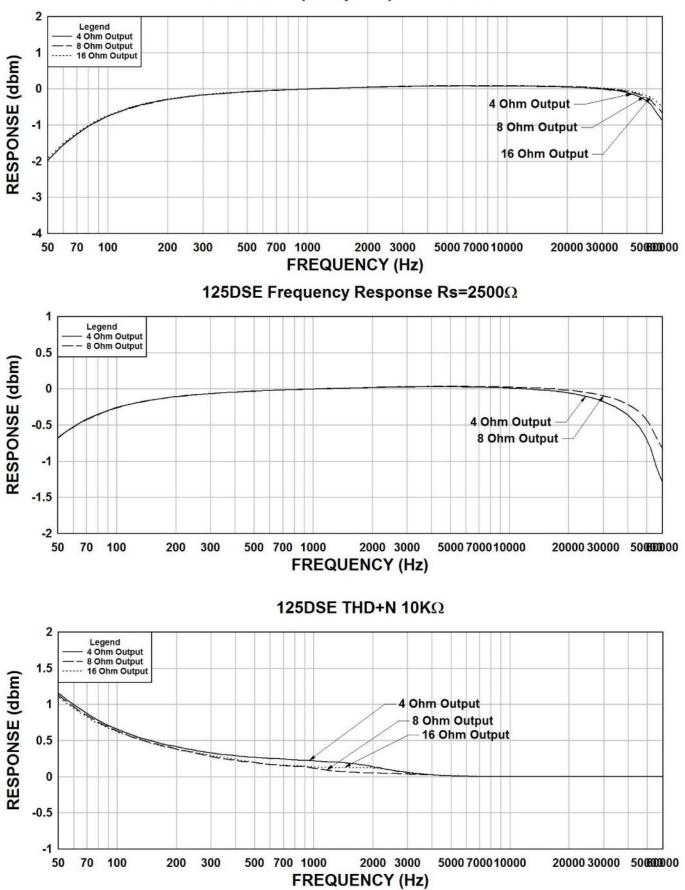




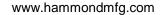


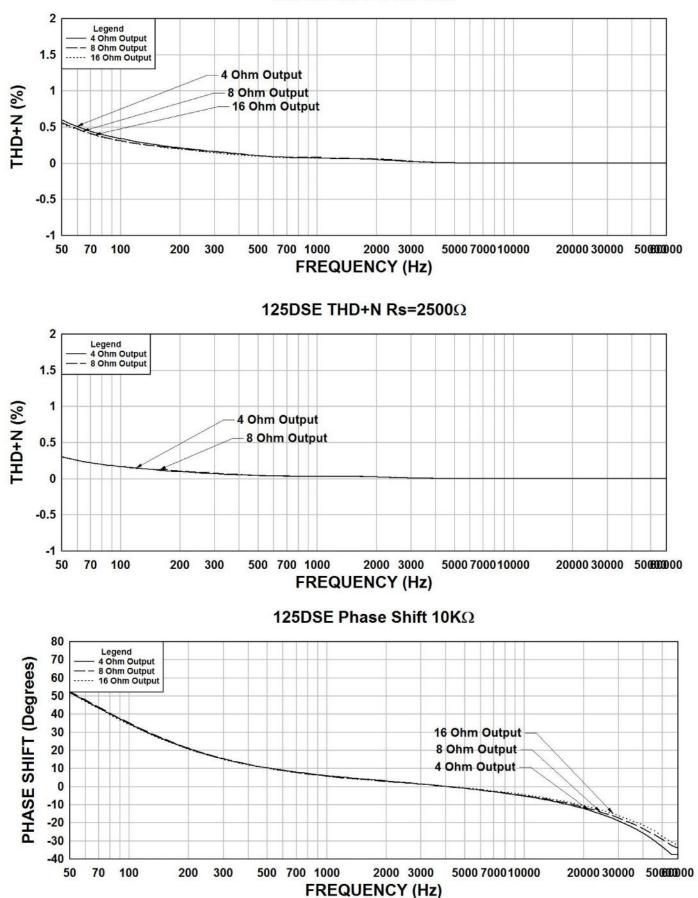
# 125DSE Frequency Response Rs=10K $\Omega$

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125DSE Frequency Response Rs=5KΩ





125DSE THD+N Rs=5KΩ

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16 Ohm Output 8 Ohm Output 4 Ohm Output

2000 3000 500 700 1000 5000 7000 10000 50 70 100 200 300 20000 30000 50000000 **FREQUENCY (Hz)** 125DSE Phase Shift Rs=2500Ω 40 Legend 4 Ohm Output PHASE SHIFT (Degrees) 8 Ohm Output 20 8 Ohm Output 4 Ohm Output 0 -20 -40 70 100 200 300 500 700 1000 2000 3000 5000 7000 10000 20000 30000 50000000 50 **FREQUENCY (Hz)** PRIMARY SECONDARY TYPICAL TEST CIRCUIT R<sub>s/2</sub> OUT R<sub>5/2</sub> Measurement instruments Hp4192a impedance analyzer Hp3456a DVM Keithley 2002 DVM D scope series iii audio analyzer Wayne Kerr 3255B with a 3265B

80

70

60

50 40

30

20 10

0 -10

-20 -30 -40

PHASE SHIFT (Degrees)

Legend 4 Ohm Output

8 Ohm Output

16 Ohm Output

\* All graphs input level 20dbu.
\*\* The results are typical and are subject to normal manufacturing and electrical tolerances.

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