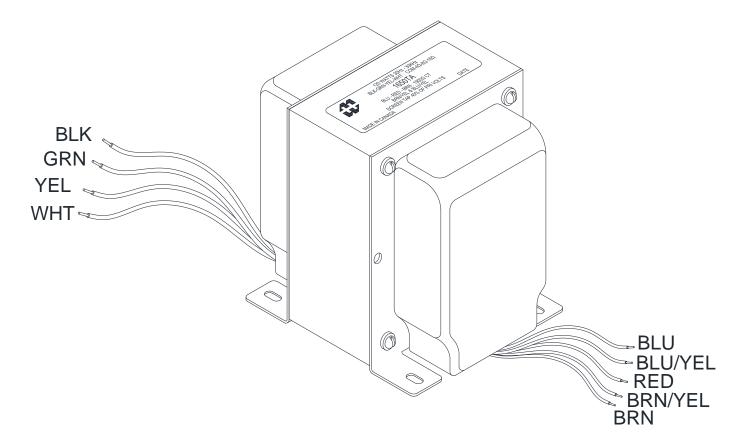


# 1650TA

#### HI-FI AUDIO OUTPUT MULTIPLE SECONDARY TRANSFORMER

- NEW & improved version of our 1608-1650 Series multiple secondary output transformers (Re-designed secondaries for easy hook-up of secondary loads).
- Designed for push-pull tube output circuits.
- Units are designed to provide ample "headroom" at bass frequencies (Note the weight of each transformer).
- All models have a secondary tapped for 4, 8 or 16 ohm outputs.
- Enclosed (shielded), 4 slot, above chassis Type "X" mounting.
- Manufactured with plastic coil forms for coil support and insulation.
- Frequency response 30Hz. to 30Khz. at full rated power (+/- 1db max. ref. 1Khz) minimum.
- Insulated flexible leads 8" min.
- Included 40% screen taps for Ultra-Linear operation (if desired).
- Typical applications Push-Pull: triode, Ultra-Linear pentode, pentode and tetrode connected audio output.
- Suggested tube types: Push-Pull Par. (4 or 6 Tubes) 6L6GC, 5881, EL34, 6550B, KT88

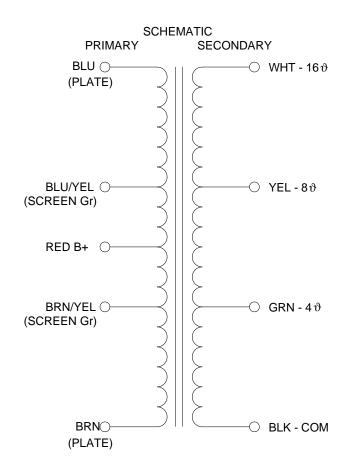


<sup>\*</sup>For Full Dimensional Details see page 4

### **1650TA ELECTRICAL SPECIFICATIONS\*\***

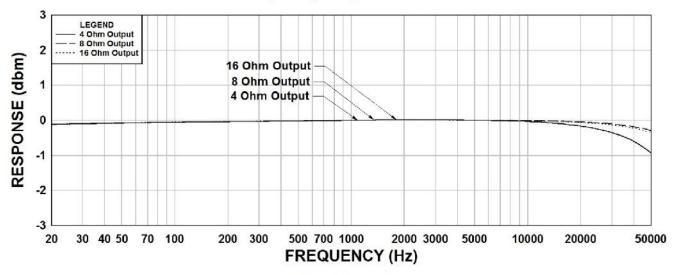
## **Schematic and Hook Up Data**

Characteristic	<u>Typical</u>
Input Impedance	1900 ծ
Output Impedance	4ϑ/8ϑ/16ϑ
Output Power	120Watts
Primary - DCR	
Blue – Brown	47.0ϑ
Secondary DCR	
Black – Green	221mϑ
Black – Yellow	294mϑ
Black – White	370mϑ
Leakage Inductance	@ 1.0kHz, 1.0V SC
Primary – Blue – Brown	63.72mH
Inductance	@ 1.0kHz, 1.0V OC
Primary – Blue – Brown	11.2Hy
Black – Green	229.6mH
Black – Yellow	282.1mH
Black – White	399.6mH
Impedance	@ 1.0kHz, 1.0V OC
Primary – Blue – Brown	71Kϑ
Black – Green	505.2ϑ
Black - Yellow	922.8ϑ
Black – White	1554.0ϑ
	See graphs for specific
_	response, Typ. {1.0db from
Frequency Response	30Hz to 30KHz
Dielectric Strength	2000Vrms
Temperature Range	-40 To 105∫C

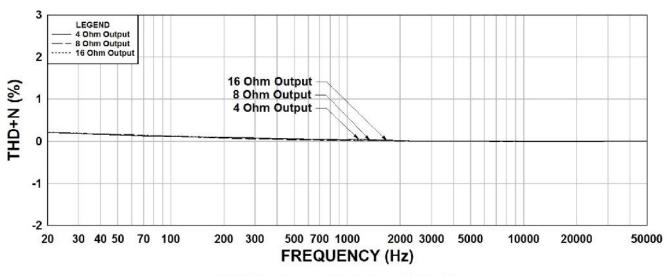


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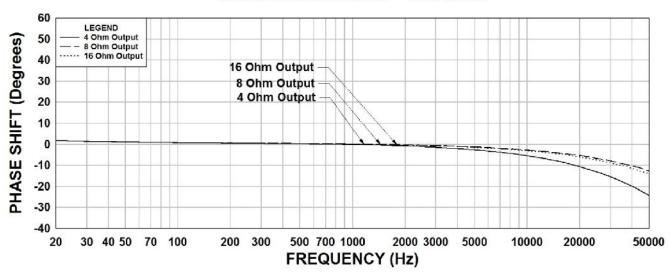
### 1650TA Frequency Response Rs = 1.9K Ohms



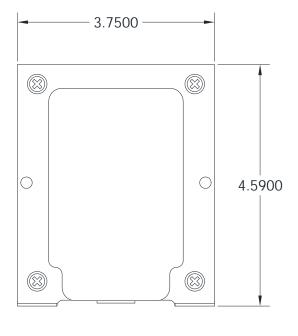
#### 1650TA THD+N Rs = 1.9K Ohms

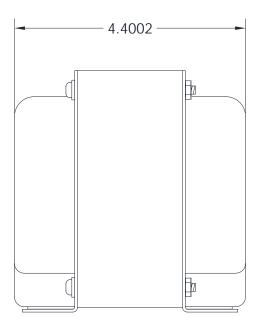


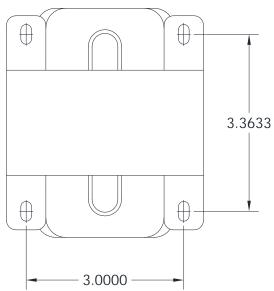
#### 1650TA Phase Shift Rs = 1.9K Ohms



#### **Dimensional Details:**







### Label:

120WATTS 30Hz - 30KHz BLK-GRN-YEL-WHT : COM-4 $\vartheta$  -8 $\vartheta$  -16 $\vartheta$ 

1650TA

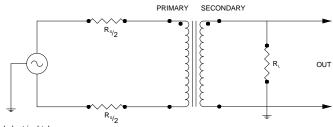
BLU - RED - BRN: 1900 <sup>®</sup> CT BRN/YEL & BLU/YEL SCREEN TAPS 40% OF PRI VOLTS

Made In Canada

DATE

TYPICAL TEST CIRCUIT

Measurement instruments Hp4192a impedance analyzer Hp3456a DVM Keithley 2002 DVM D scope series iii audio analyzer Wayne Kerr 3255B with a 3265B



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

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