

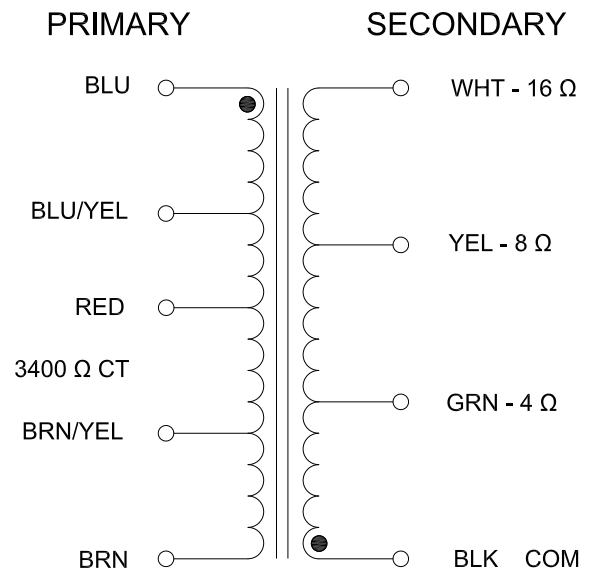
# 1650KAP


## PUSH-PULL HI-FI POTTED TRANSFORMER

- Designed for push-pull tube output circuits.
- A perfect match to our 300P potted power transformers.
- Enclosed in a drawn steel case, the transformer is completely potted in epoxy.
- Frequency response 30 Hz. to 30 Khz. at full rated power (+/- 1 db max. ref. 1 Khz) minimum.
- Open style with minimum 12" long primary and secondary leads
- Includes 40% screen taps for Ultra-Linear operation if desired.
- Finished in a black powder paint (to match our 300P series power transformers).
- Typical applications - Push-Pull: triode, Ultra-Linear pentode, pentode and tetrode connected audio output.
- Suggested tube types: 6L6GC, 807, 5881, EL34, 6146B, 6550B

ELECTRICAL SPECIFICATIONS	
Characteristic	Typical
Input Impedance	3400 Ohms
Output Impedance	4, 8 & 16 Ohms
Output Power	50 Watts
<b>DCR</b>	
Primary Blue-Red	32.74 Ohms
Primary Red-Brown	36.71 Ohms
Secondary Black-Green	0.306 Ohm
Secondary Black-Yellow	0.432 Ohm
Secondary Black-White	0.540 Ohm
<b>Inductance   Impedance</b>	
	@ 60Hz, 10.0V OC
Primary Blue-Brown	168H   72KOhm
<b>Leakage Inductance</b>	
	@ 60Hz, 10.0V SC
Primary Blue-Brown	10.02mH
<b>Dielectric Strength</b>	
	2000Vrms
<b>Temperature Range</b>	
	-40 To 105°C

## SCHEMATIC




**HAMMOND  
MANUFACTURING**<sup>TM.</sup>

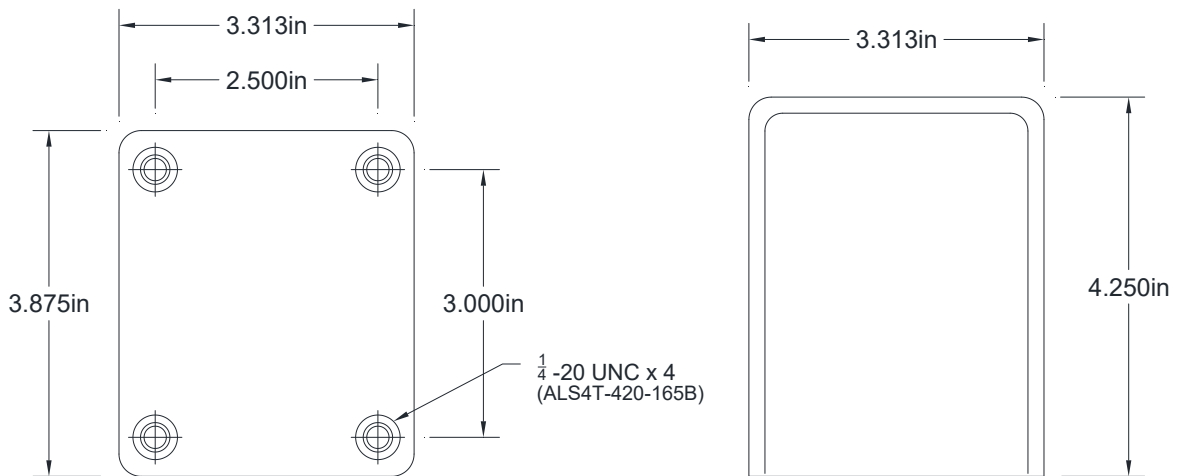
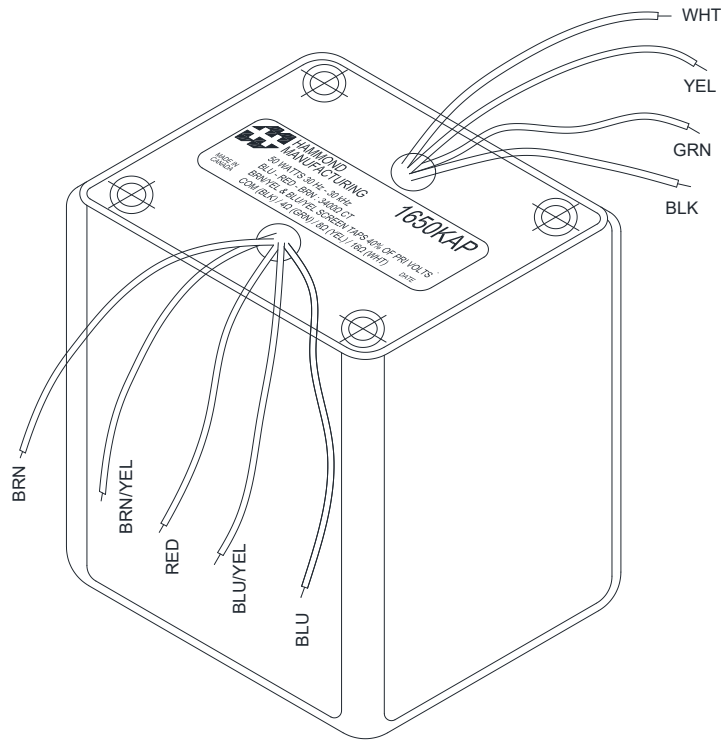
1650KAP

50 WATTS 30 Hz - 30 kHz  
 BLU - RED - BRN : 3400Ω CT  
 BRN/YEL & BLU/YEL SCREEN TAPS 40% OF PRI VOLTS  
 COM (BLK) / 4Ω (GRN) / 8Ω (YEL) / 16Ω (WHT)

Made In Canada DATE

Note: The above examples of possible combinations are to help you narrow down the choices of transformers for your favorite tube types. How you operate the tubes (push-pull, push-pull parallel, ultra-linear, class, B+, bias, operating points, etc.) will change optimum plate to plate load impedance. Only a few of the most popular tubes are shown. As more tubes become available we will add them to the list. A tube manual or tube manufacturer's technical data sheets should be consulted first, before making a decision on a proper output transformer.

**DIMENSIONAL DETAILS:**

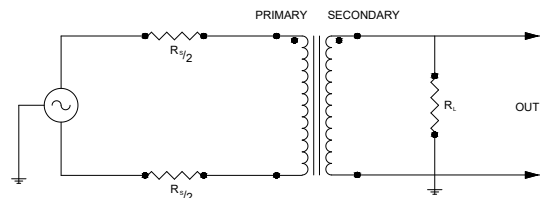


**TEST CONDITIONS**

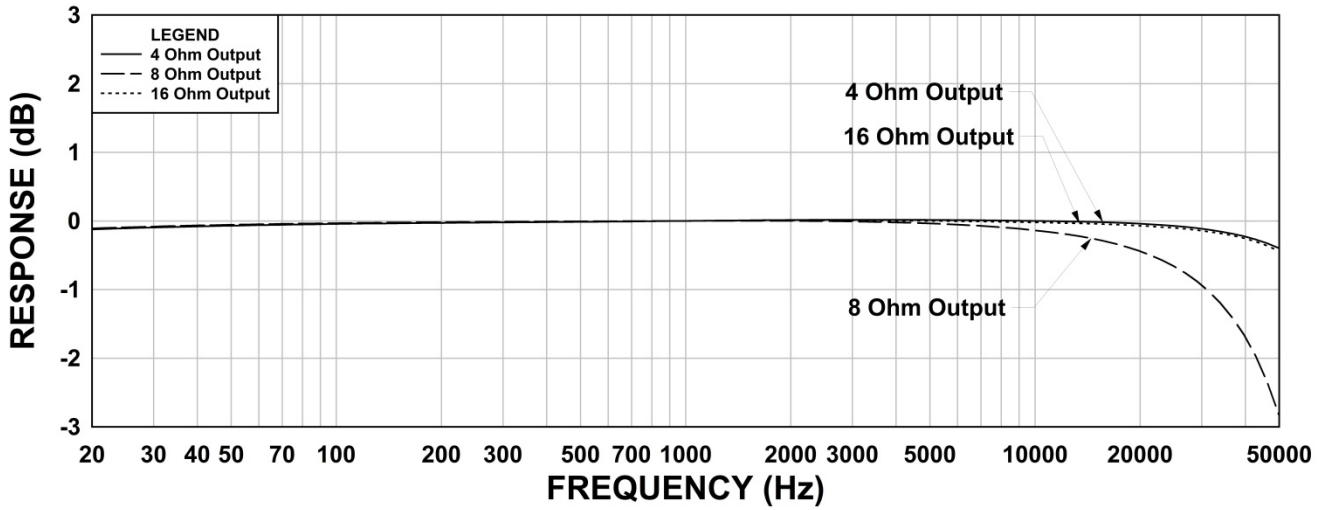
Measurement Instruments:  
 dScope Series III Audio Analyzer  
 Wayne Kerr 3255B with a 3265B Inductance Analyzer  
 HP 4192a LF Impedance Analyzer  
 Keithley 2010 DVM

\* All graphs input level 27dBu @1.0KHz reference.  
 \*\*The results are typical and are subject to normal manufacturing and electrical tolerances.

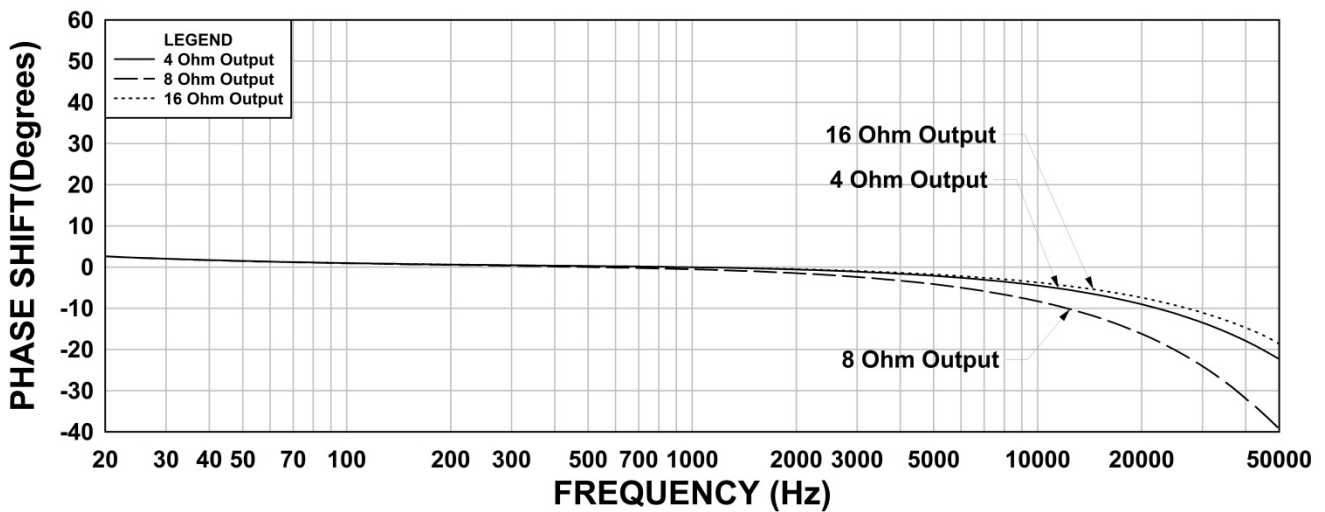
**TYPICAL TEST CIRCUIT**



**1650KAP Frequency Response RS = 3400 Ohms**



**1650KAP Phase Shift RS = 3400 Ohms**



**1650KAP THD+N RS = 3400 Ohms**

