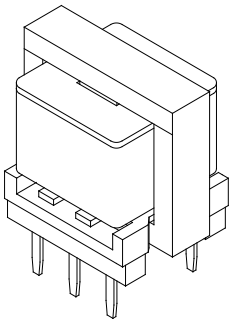
Hammond Mfg. Co. Ltd., Electronics Division

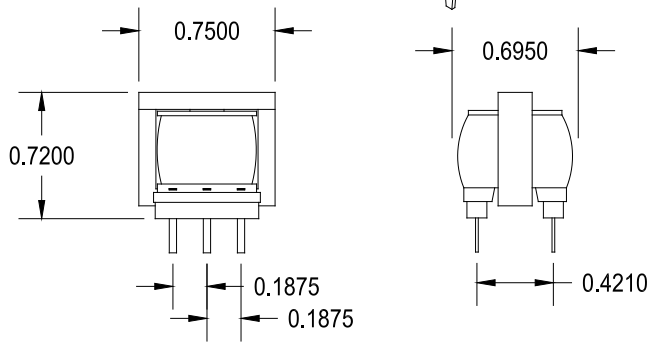
www.hammondmfg.com

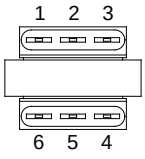
142D

PRINTED CIRCUIT BOARD AUDIO TRANSFORMER
IMPEDANCE MATCHING

Pin type, P.C. board mount, suitable for matching, isolation, pulse, interstage and driver applications.
Secondary may be used as primary and primary as secondary.
Power level: 100mw @ 200 Hz. to 15 Khz.
-Freq. range @ +10 dbm is 200 Hz. to 15 Khz. +/- 1.0db
-Freq. range @ +20 dbm is 200 Hz. to 15 Khz. +/- 1.0db
-Freq. measurements with no D.C. saturation.





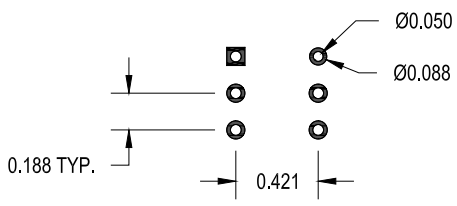


BOTTOM VIEW

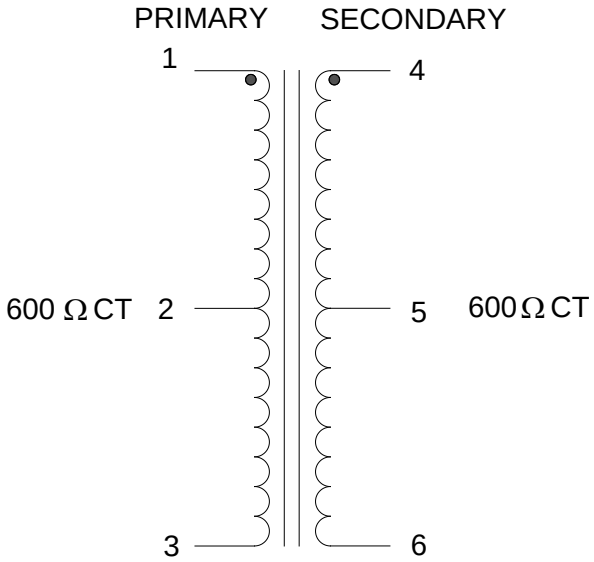
ELECTRICAL SPECIFICATIONS

Characteristic	Typical
Input Impedance	600 ΩCT
Output Impedance	600 ΩCT
Output Power	0.100 Watts
Pri DC Unblaanced	15.0 mA
DCR	
Primary 1-3	44Ω ±20%
Secondary 4-6	58Ω ±20%
Inductance	@ 1.0 kHz, 1.0 V OC
Primary 1-3	1.10H
Secondary 4-6	1.10H
Leakage Inductance	0.072H
Impedance	@ 1.0 kHz, 1.0 V OC
Primary 1-3	5.0KΩ
Secondary 4-6	5.0KΩ
Frequency Response	±1.0db from 200Hz to 15KHz
Turns ratio	1:1
Dielectric Strength	1500 Vrms
Storage Temp	-40 To 105°C**
Operating Temp	-40 To 85°C**

PCB LAYOUT

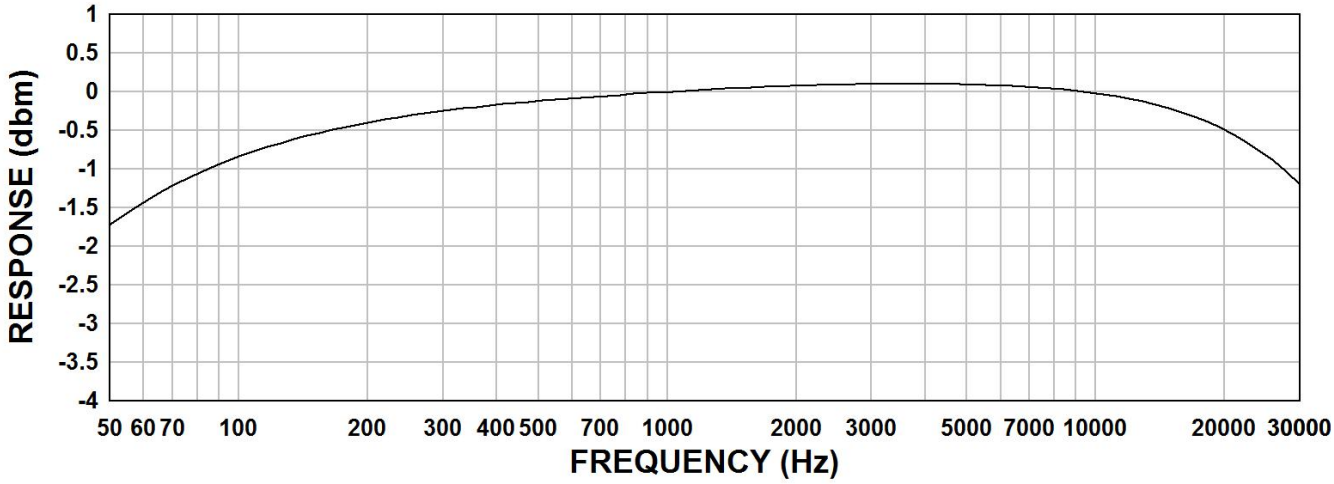


SCHEMATIC DIAGRAM



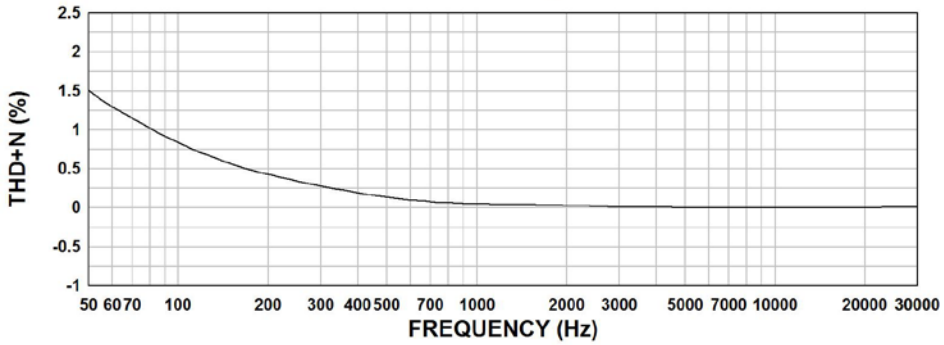
142D FREQUENCY RESPONSE

600 OHM CT TO 600 OHM CT
INPUT SIGNAL 1Vp-p



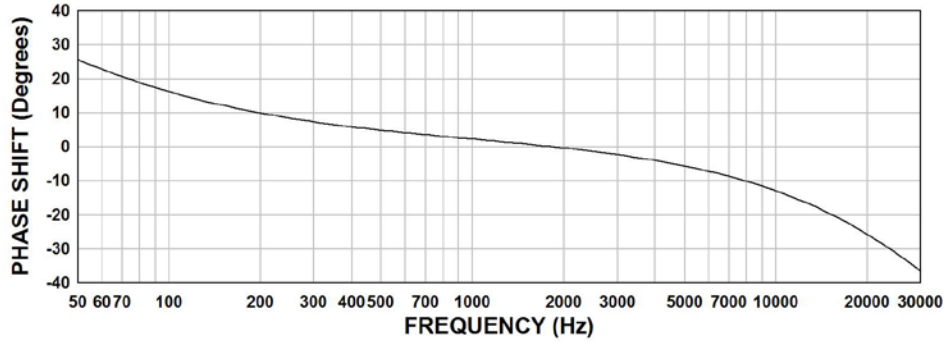
142D THD+N

600 OHM CT TO 600 OHM CT
INPUT SIGNAL 1Vp-p

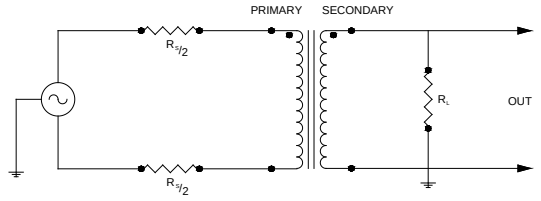


142D PHASE SHIFT

600 OHM CT TO 600 OHM CT
INPUT SIGNAL 1Vp-p



TYPICAL TEST CIRCUIT



Measurement instruments
Hp4192a impedance analyzer
Hp3456a DVM
Keithley 2002 DVM
D scope series iii audio analyzer

** Variations in the transformer materials and environmental conditions may reduce the workable temperature range.