

# 142C

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.

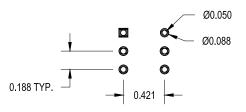
Power level: 100mw @ 200 Hz. to 15 Khz.

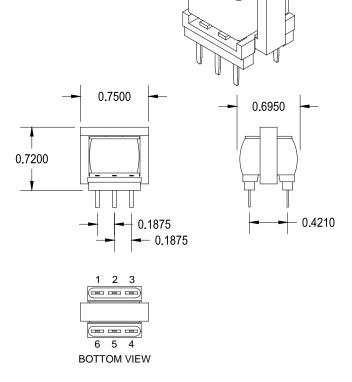
- -Freq. range @ +10 dbm is 200 Hz. to 15 Khz. +/- 1.0db
- -Freq. range @ +20 dbm is 200 Hz. to 15 Khz. +/- 1.0db
- -Freq. measurements with no D.C. saturation.

### **ELECTRICAL SPECIFICATIONS**

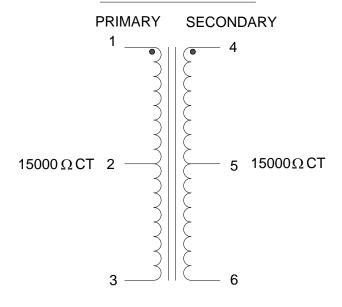
<u>Characteristic</u>	<u>Typical</u>
Input Impedance	15000 ΩCT
Output Impedance	15000 ΩCT
Output Power	0.100 Watts
Pri DC Unblaanced	4.0 mA
DCR	
Primary 1-3	1050Ω ±20%
Secondary 4-6	1390Ω ±20%
Inductance	@ 1.0 kHz, 1.0 V OC
Primary 1-3	21.0H
Secondary 4-6	21.0H
Leakage Inductance	2.10H
Impedance	@ 1.0 kHz, 1.0 V OC
Primary 1-3	102ΚΩ
Secondary 4-6	102ΚΩ
•	
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**



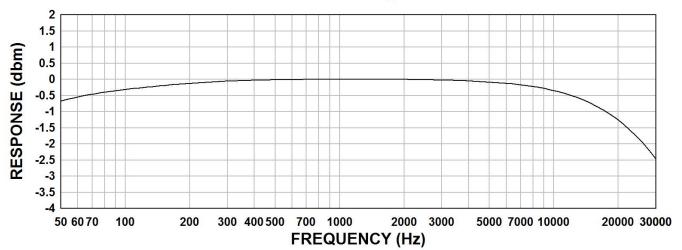


#### SCHEMATIC DIAGRAM

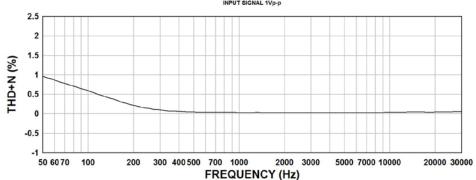


### 142C FREQUENCY RESPONSE

15000 OHM CT TO 15000 OHM CT INPUT SIGNAL 1Vp-p

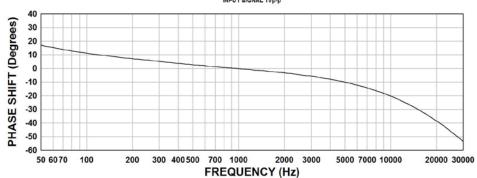


#### 142C THD+N 15000 OHM CT TO 15000 OHM CT INPUT SIGNAL 1Vp-p

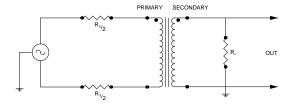


#### 142C PHASE SHIFT

15000 OHM CT TO 15000 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

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<sup>\*\*</sup> Variations in the transformer materials and environmental conditions may reduce the workable temperature range.