

### HS-4

#### Description:

Triad's **HS-4** Input Audio Transformer provides the durability and precision required in today's demanding designs. **Mu-Metal** case construction for magnetic field immunity and up to 95 dB Hum reduction. **Ample turns ratios** to accommodate source to load impedance matching. **Wide range power handling capacity** to deliver full power without distortion within  $\pm 3$ dB. Applications include: Signal Pre-Amplification, Impedance Matching, Inter-stage Isolation, Signal Level step up/down. **Dependable** hermetically sealed construction with low temperature rise and high heat conductivity.

#### Electrical Specifications (@25°C)

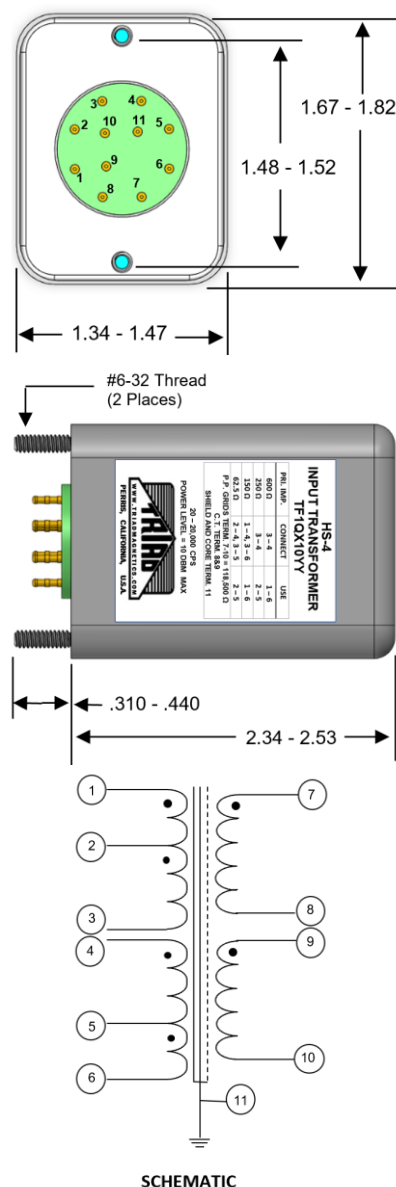
Impedance		Overall Turns Ratio	DCR ( $\Omega$ )	Power level dBm
Pri ( $\Omega$ )	Sec ( $\Omega$ )			
600/250 150/62.5	118.5k	1:14	1-2 = 12 2-3 = 20 4-5 = 20 5-6 = 12 7-8 = 2.3k 9-10 = 2.3k	10

PARAMETER	CONDITIONS	TYPICAL
Frequency Range		20 Hz – 20KHz
Gain	1kHz, $R_s = 600\Omega$ , $R_L = 118.5k\Omega$	22 dB
Distortion (THD+N%)	1kHz, +10 dBu input, $R_s = 600\Omega$ , $R_L = 118.5k\Omega$	0.002%
	1kHz, +0dBu input, $R_s = 600\Omega$ , $R_L = 118.5k\Omega$	0.003%
	1kHz, -10dBu input, $R_s = 600\Omega$ , $R_L = 118.5k\Omega$	0.004%
Max input level (20Hz)	1% THD + N%, $R_s = 600\Omega$ , $R_L = 118.5k\Omega$	+7dBu
Frequency response (1 kHz Ref.)	20 Hz, $R_S = 600\Omega$ , $R_L = 118.5k\Omega$	-0.30 dB
	20kHz, $R_S = 600\Omega$ , $R_L = 118.5k\Omega$	-2.5 dB
Phase Shift @ 20Hz	Reference to source generator $R_s = 600\Omega$ , $R_L = 118.5k\Omega$	+5.9°
Phase shift @ 20kHz		2.2°
CMRR	60 Hz	119 dB
	1 kHz	99 dB
Temperature Rating	Operation & Storage	0°C to 70°C
Weight (grams)		250 Typ.

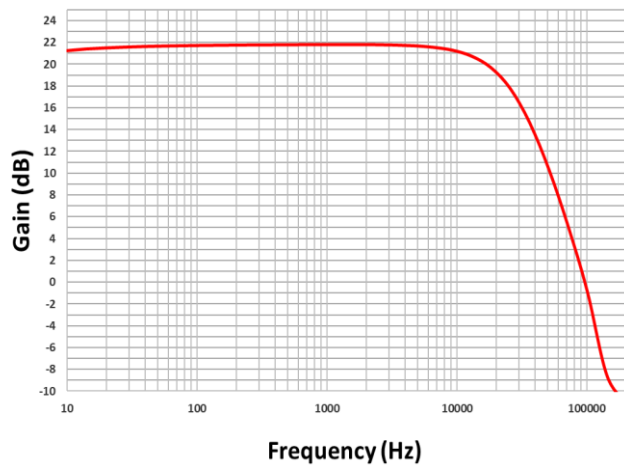
\* Upon printing, this document is considered "uncontrolled". Please contact Triad Magnetics' website for the most current version.



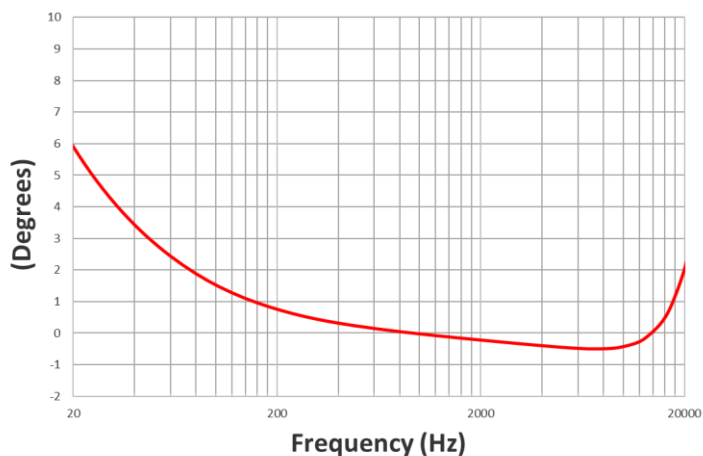
For illustration purpose only



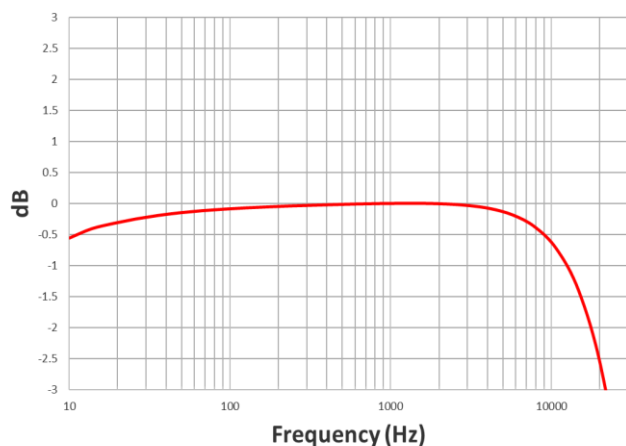
HS-4 Gain



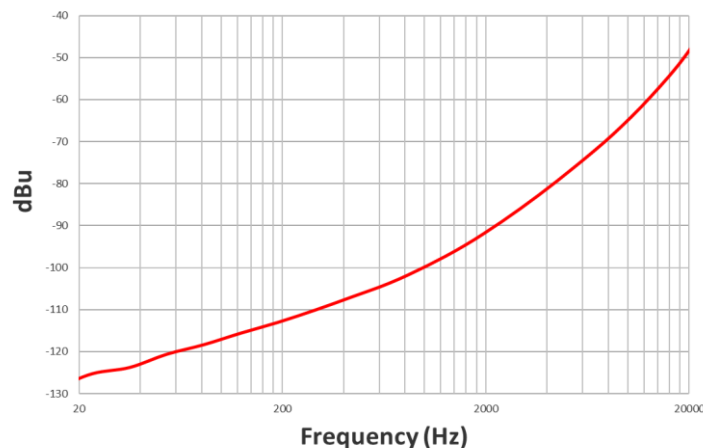
HS-4 Phase



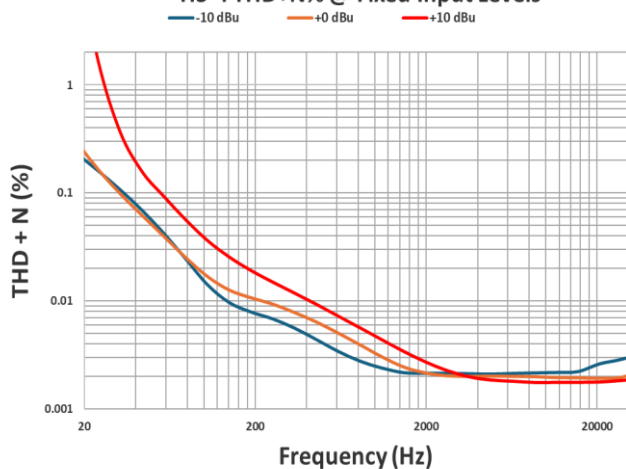
HS-4 Frequency Response



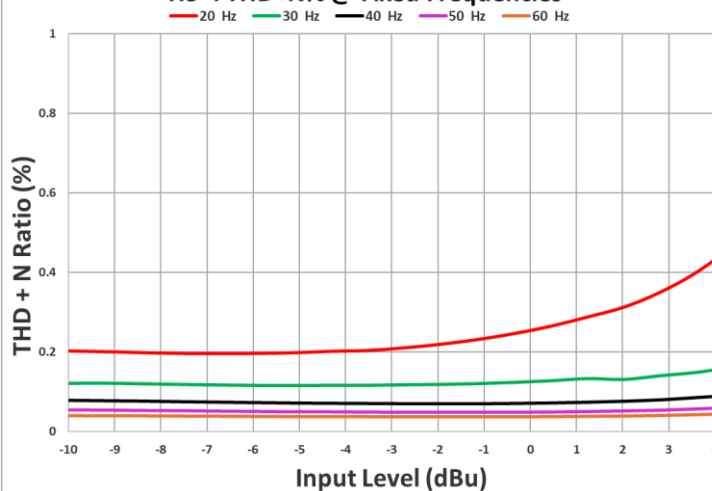
HS-4 CMRR



HS-4 THD+N% @ Fixed Input Levels



HS-4 THD+N% @ Fixed Frequencies



NOTE: Graph data was taken on a random sample using an Audio Precision Model APX555 Audio Analyzer.