



VT1

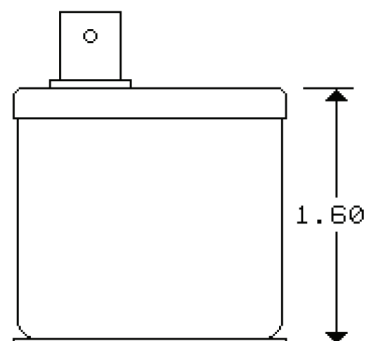
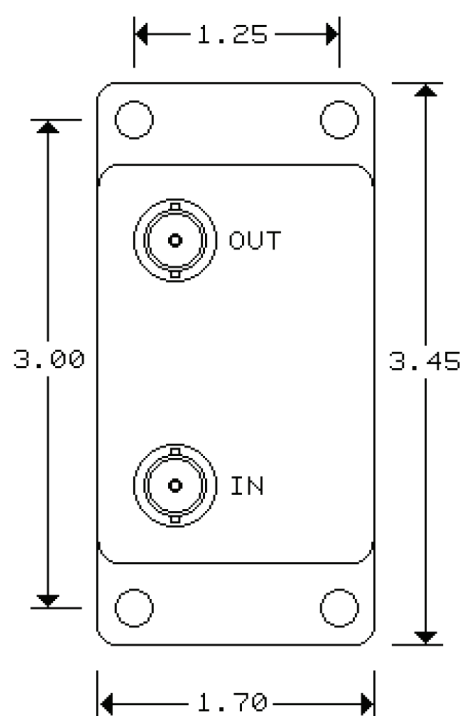
Analog video isolation transformer for 75Ω systems

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Schematics

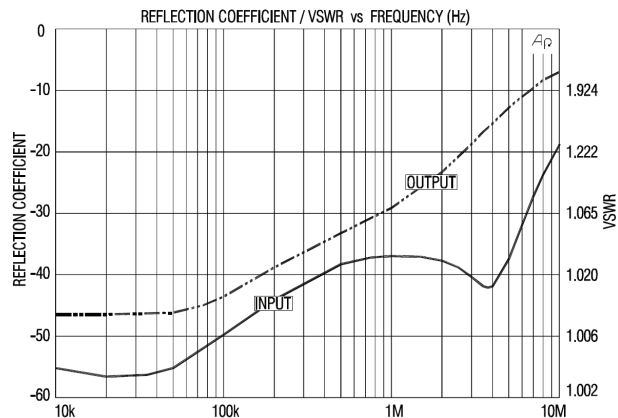
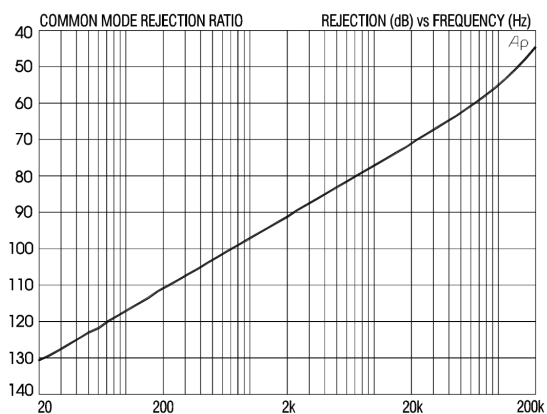
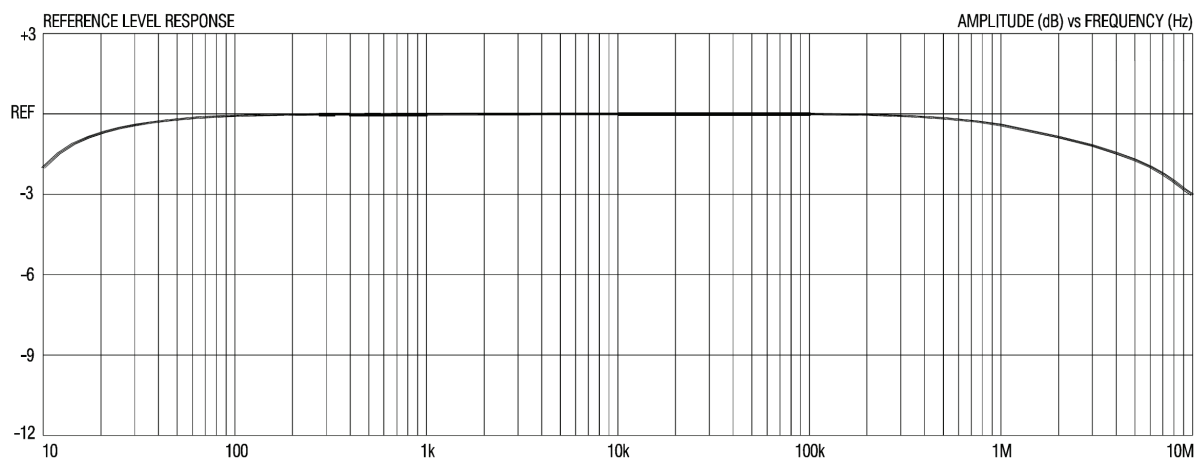


Mounting holes, 4 places, are 0.212 diameter

All dimensions in inches

Housing is electrically isolated

Graphs



Features

When inserted into standard 75Ω video cabling, this transformer based isolator eliminates video “hum bars”, as well as the often associated audio hum or buzz in multimedia entertainment systems, by breaking the so-called “ground loop”.

- Mounting holes, allowing easy horizontal or vertical mounting to standard rack rails
- Very high ground isolation: 120 dB CMRR typical at 60 Hz
- Wide bandwidth: -3 dB at 10 Hz and 10 MHz
- High input to output withstand voltage: 350 V RMS min at 60 Hz
- Precise impedance matching: VSWR under 1.06 typical up to 6 Mhz
- Low insertion loss: 0.55 dB typical

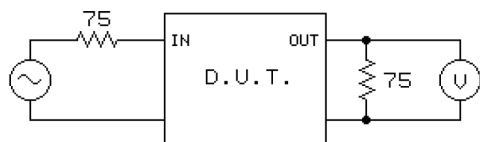
Ordering information

Module:

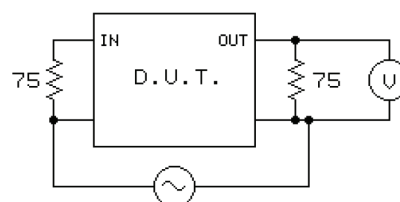
- **VT1:** Analog video isolation transformer for 75Ω systems

Specifications (Source Z = load Z = 75Ω, signal level = 1 V pk-pk unless noted)

Parameter	Conditions	Minimum	Typical	Maximum
Insertion loss	10 kHz, test circuit 1	-0.4 dB	-0.55 dB	-0.7 dB
Differential gain, 3.58 MHz	FCC/NTC-7 composite, Tektronix VM700A test set, pk-pk		< 0.02 %	0.05 %
Differential phase, 3.58 MHz	FCC/NTC-7 composite, Tektronix VM700A test set, pk-pk		< 0.02°	0.05°
Luminance non-linearity	FCC/NTC-7 composite, Tektronix VM700A test set, pk-pk		< 0.1 %	0.2 %
Bandwidth	LF -3 dB re 10 kHz, test circuit 1		8 Hz	10 Hz
	HF -3 dB re 10 kHz, test circuit 1	8 MHz	10 MHz	
Input VSWR	1 kHz to 8 MHz, HP 3577A Analyzer & 35676A R/T test kit		1.065	1.2
	3.58 MHz, HP 3577A Analyzer & 35676A R/T test kit		1.02	1.065
Common-mode rejection ratio (CMRR)	60 Hz, test circuit 2	100 dB	120 dB	
DC resistance	input or output		2.61 Ω	
Capacitance	input to output, 1 kHz		1.94 nF	
	input or output to case, 1 kHz		35 pF	
Temperature range	operation or storage	0° C		70° C
Breakdown voltages 60 Hz, 1 minute test duration (see IMPORTANT NOTE below)	input to output	350 V RMS		
	input or output to case	500 V RMS		



TEST CIRCUIT 1



TEST CIRCUIT 2

All minimum and maximum specifications are guaranteed. Unless noted otherwise, all specifications apply at 25°C. Specifications are subject to change without notice. All information herein is believed to be accurate and reliable, however no responsibility is assumed for its use nor for any infringements of patents which may result from its use.

IMPORTANT NOTE: THIS PRODUCT IS NOT INTENDED FOR USE IN CIRCUMSTANCES WHERE THE DC OR PEAK AC VOLTAGE BETWEEN INPUT AND OUTPUT CONNECTIONS EXCEEDS 34 VOLTS OR WHERE ITS FAILURE COULD CAUSE INJURY OR DEATH.