

VRD-1FF CATV isolator

- Improves audio/video quality by reducing 60 Hz ground currents
- 2 MHz to 1300 MHz bandwidth spans VHF/FM/UHF/CATV spectrum
- Capacitive based design minimizes broadcast channel interference
- Meets FCC Part 76 Regulations for CATV systems

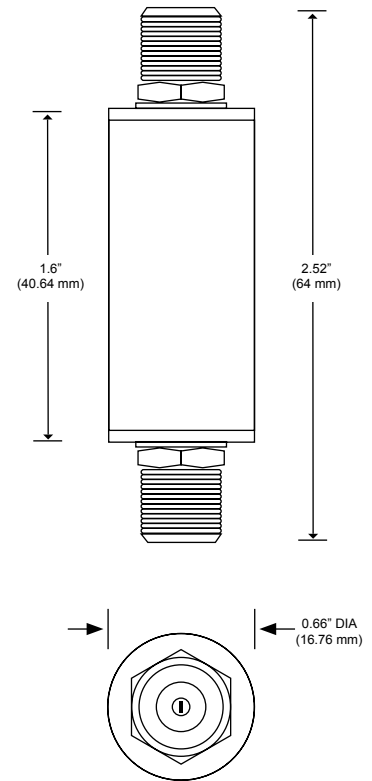


The Iso•Max VRD-1FF is a high performance capacitive isolator that has been meticulously designed to break the ground loop that causes hum and buzz in audio, 60 cycle hum bars in video or introduces frequency dips that cause channels to drop in digital cable.

Housed in a compact cylinder, this second generation VRD-1FF employs a unique RF engineered solution that delivers a ruler-flat response from 2 Mhz to over 1300 MHz spanning the VHF/FM/UHF and CATV spectrum. Gold plated F connectors are carefully machined to ensure true 75 Ω compatibility for optimal signal integrity and minimize reflections or ghosting.

Plug and play easy to use, this passive solution doesn't require any power. One simply inserts the VRD-1FF in series with the incoming signal and it quietly goes to work without degrading the signal. This makes the VRD-1FF a 'must have' for the AV technician that is servicing and installing digital cable as well as conventional CATV or VHF/UHF antenna or MATV systems.

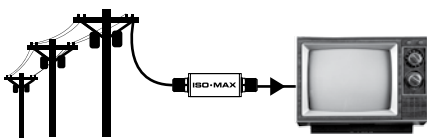
Dimensions



Connectors are nickel plated brass "F" type with gold plated contacts.

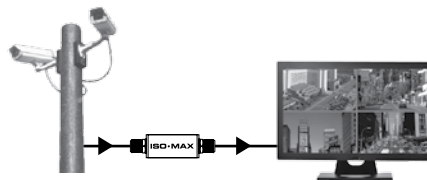
Either connector may be used for input or output.

Applications



VRD-1FF with digital cable tv

The Iso•Max VRD-1FF is the perfect 'trouble-solving partner for digital video transmission problems. It isolates the source and destination without introducing frequency dips that cause channels to drop. It works equally well to get rid of audio hum and buzz with standard cable TV.



Solving CATV hum bars

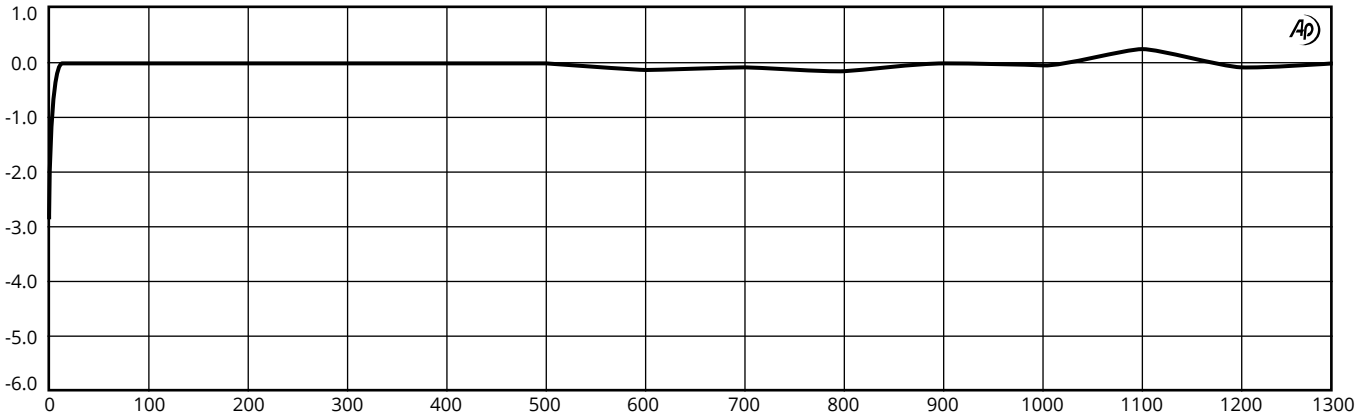
When interfacing a distant camera to a video system, hum in the form of 60 cycle hum bars will often find their way into the picture. The Iso•Max VRD-1FF provides a plug & play solution that eliminates the problem-causing stray DC currents without affecting the video quality.



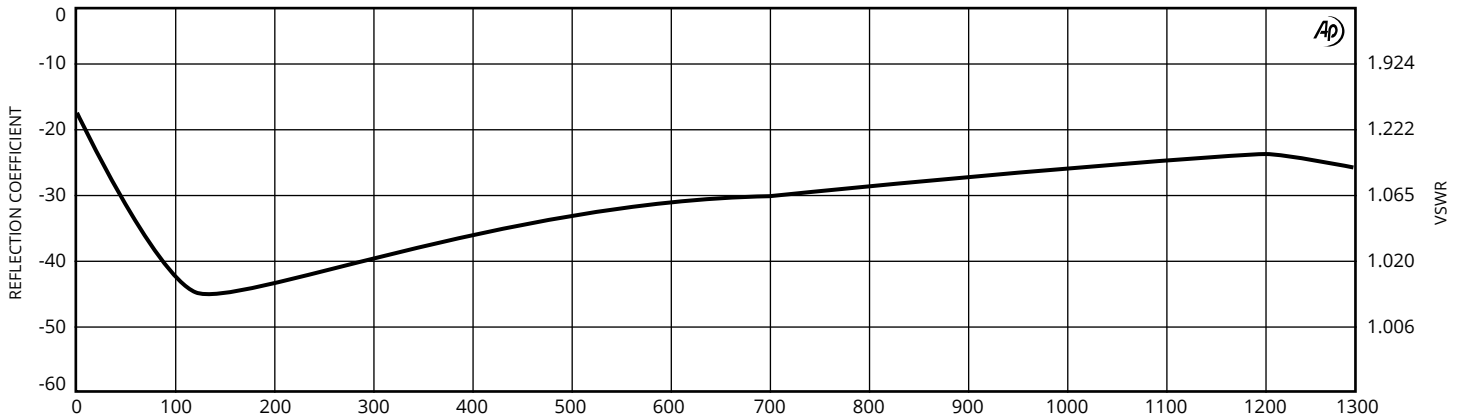
Distributing video in large facilities

Distributing video around a large facility such as an airport, arena, or convention hall can often lead to quality picture problems caused by fluctuating voltage references at various power drops. The VRD-1FF isolates the local monitor from disruptive DC currents.

AMPLITUDE (dB) vs FREQUENCY (MHz)



REFLECTION COEFFICIENT (dB) and VSWR vs FREQUENCY (MHz)

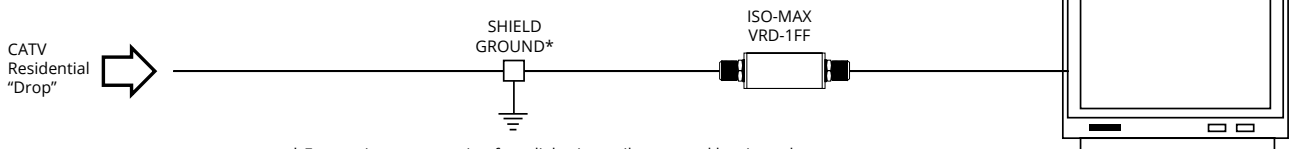


PARAMETER	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM
Insertion loss	5 MHz, HP 3577A Analyzer		-0.19 dB	
	50 MHz, HP 3577A Analyzer		-0.01 dB	-0.1dB
Bandwidth	LF -3 dB re 100 MHz, HP 3577A Analyzer		1 MHz	1.2 MHz
	HF -3 dB re 100 MHz, HP 8711A Analyzer	1000 MHz	> 1300 MHz	
VSWR, input or output port	50 MHz to 866 MHz, HP 8711A Analyzer		1.08 (see graph)	1.2
Input to output voltage				200 V DC
Externally Radiated Field at 3 Meters	Ref. level = 1.414mVrms, Frequency = 50MHz		1.1uV/meter	
	Ref. level = 1.414mVrms, Frequency = 500MHz		4.8uV/meter	
	Ref. level = 1.414mVrms, Frequency = 1GHz		6.3uV/meter	
Margin below FCC part 76 Limits	Ref. level = 1.414mVrms, Frequency = 50MHz		25.6dB	
	Ref. level = 1.414mVrms, Frequency = 500MHz		12.5dB	
	Ref. level = 1.414mVrms, Frequency = 1GHz		10.1dB	
Cable length	input			
	output			
Isolation Impedance	output shield to input shield, 60 Hz	1 MΩ	1.3 MΩ	

All minimum and maximum specifications are guaranteed. Unless noted otherwise, all specifications apply at 25°C. Specifications 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. No license is granted by implication or otherwise under any patent or patent rights of Jensen Transformers, Inc.

***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.**

Source Z = load Z = 75 Ω, signal level = -20 dBm



* For maximum protection from lightning strikes, a good low impedance ground is necessary. Most local codes require this at building entry.