Isolator with 15 dB Isolation from 18 to 26.5 GHz, 10 Watts and SMA Female



PE83IR1050

Features

- 18 to 26.5 GHz Frequency Range
- Max Forward Power 10 Watt CW
- Max Reverse Power 1 Watt CW
- Insertion Loss 1.5 dB
- VSWR < 1.5:1
- Isolation > 15 dB
- SMA Female Connectors

Applications

- Radar Systems
- Military
- Wireless Radio Systems
- Telecom Infrastructure
- Communication Systems
- R&D Labs
- Microwave Radio Systems

Description

The PE83IR1050 is a single junction isolator offering a forward power rating of 10 Watt and reverse power rating of 1 Watt CW over an operational frequency band of 18 to 26.4 GHz. This coaxial isolator uses SMA female connectors on all ports and has a minimum of 15 dB isolation.

Pasternack offers a wide variety of isolators to fit your needs. These are two-port devices that transmit microwave or radio frequency power in one direction only and block the signal in the opposite direction. They can be thought of as a diode for RF energy. Isolators are used to isolate equipment from the effects of conditions outside of the equipment. For instance they are used to prevent a microwave source being detuned by a mismatched load. Pasternack's isolators feature excellent insertion loss, high isolation and reliability.

Electrical Specifications

Description	Min	Typ	Max	Units
Frequency Range	18		26.5	GHz
Impedance		50		Ohms
Insertion Loss			1.5	dB
Isolation	15			dB
VSWR			1.5:1	
Forward Power, CW			10	Watts
Reverse Power, CW			1	Watt

Electrical Specification Notes:
Due to the magnetic components in the Isolators,please keep it at least 0.2 inches away from magnetic materials during installation or placement.

Mechanical Specifications

Size

Length	0.94 in [23.88 mm]
Width	0.39 in [9.91 mm]
Height	0.35 in [8.89 mm]
Weight	0.03 lbs [13.61 g]
Body Material and Plating	Aluminum Alloy

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Configuration

Design	Single Junction
Direction	Clockwise
Package Style	Connectorized
Connector 1	SMA Female
Connector 2	SMA Female

Environmental Specifications

Temperature

Operating Range	-20 to +70 deg C
Storage Range	-40 to +85 deg C
Humidity	100% RH at 35ºc, 95%RH at 40ºc
Shock	20G for 11msc half sin wave,3 axis both directions
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Altitude	30,000 ft. (Epoxy Seal Controlled environment)

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

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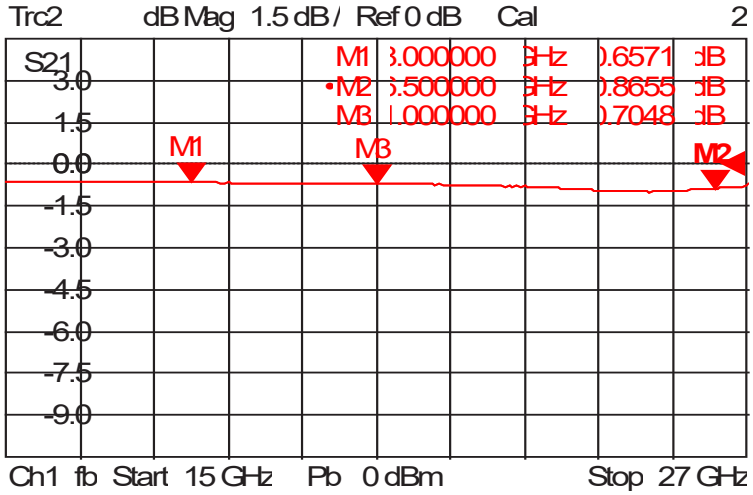
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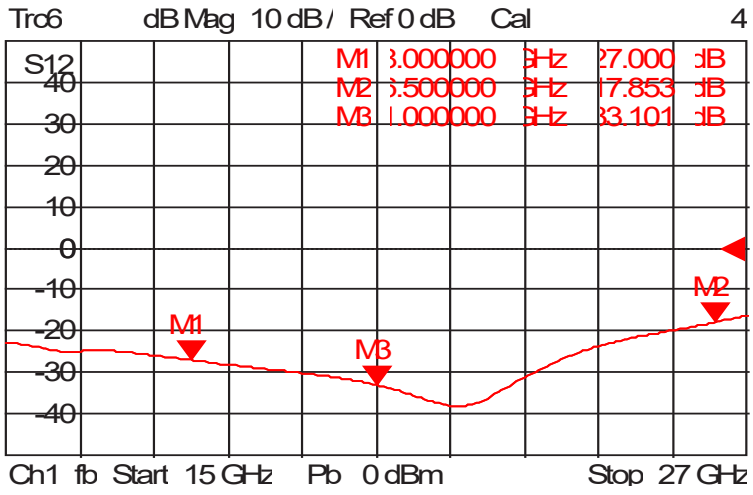
PE83IR1050

Typical Performance Data

Insertion Loss



Isolation



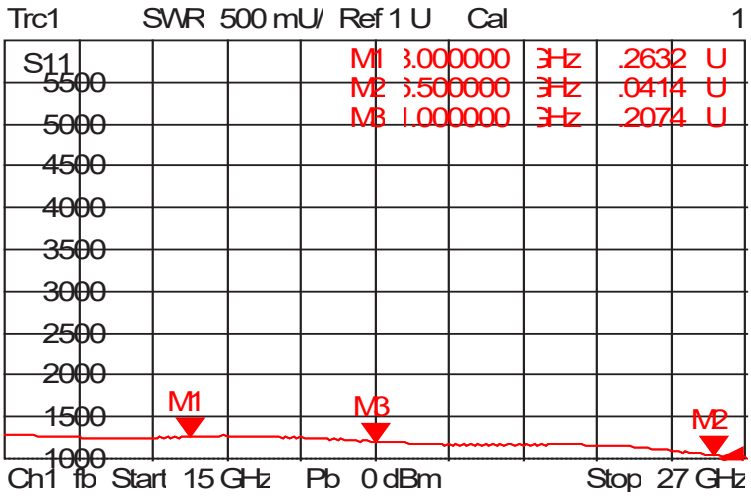
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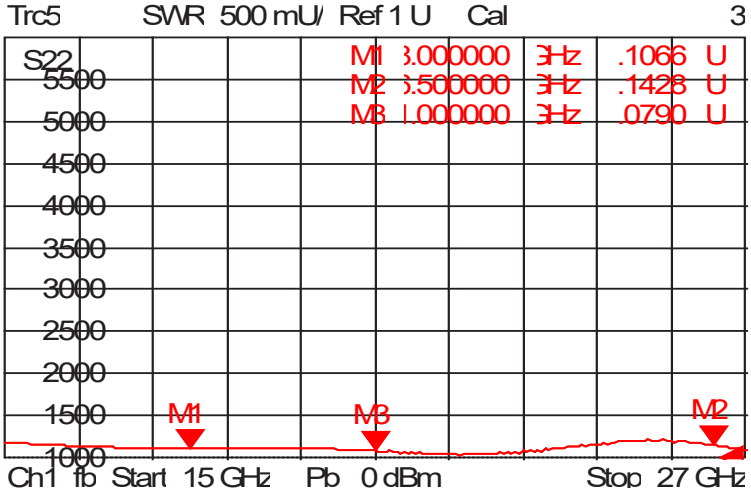


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VSWR 1



VSWR 2



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Isolator with 15 dB Isolation from 18 to 26.5 GHz, 10 Watts and SMA Female from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: Isolator with 15 dB Isolation from 18 to 26.5 GHz, 10 Watts and SMA Female PE83IR1050

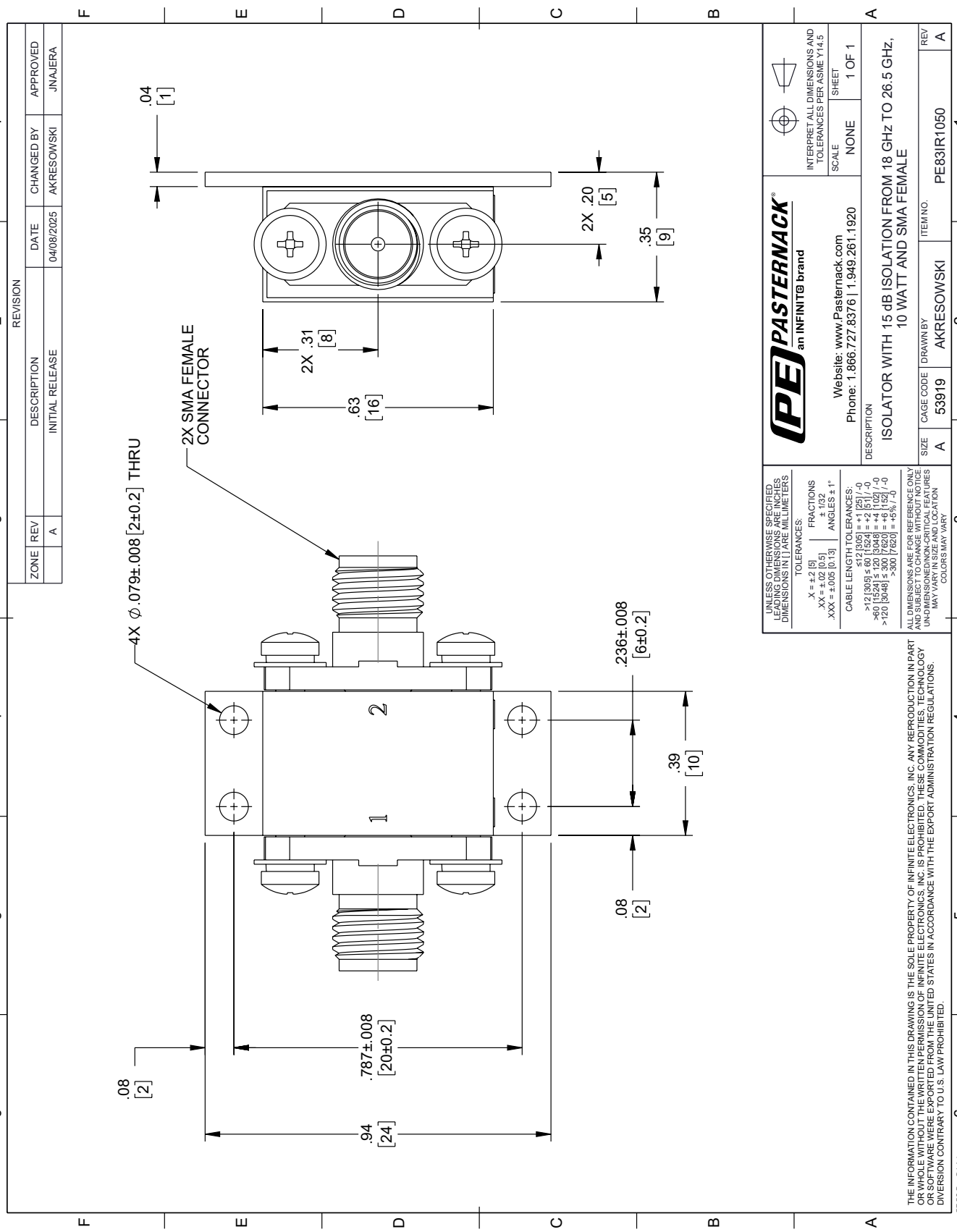
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PE83IR1050 CAD Drawing

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