

Q Band Waveguide Junction Circulator, 33 to 50 GHz

Description:

Model SNF-22-CA is a full Q band, waveguide junction circulator that covers the frequency range of 33 to 50 GHz. The full band circulator is designed and manufactured to provide a low insertion loss of 0.6 dB with good flatness. The circulator also offers a moderate isolation of 16 dB for system integration. The input and output ports are WR-22 waveguides with UG-383/U anti-cocking flanges. The full band isolator is offered under model number STF-22-S1-M. The higher isolation and narrow band models with up to 50% of the



waveguide bandwidth are offered under the product SNW with single junction and 3-junction configurations.

Features:

- Full Waveguide Band Operation
- Low Insertion Loss
- Moderate Isolation

Applications:

- Port Isolation
- Instrumentation
- Module Integration

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	33 GHz		50 GHz
Insertion Loss	/ N	0.6 dB	1.0 dB
Isolation	The same of the sa	12 dB	
Return Loss	- 11 N	12 dB	
Forward Power Handling			5 W (CW)
Reverse Power Handling	D /0 * 0 8 8 *		1 W (CW)
Specification Temperature	IVIII III 1973 (+25 °C	nc.
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

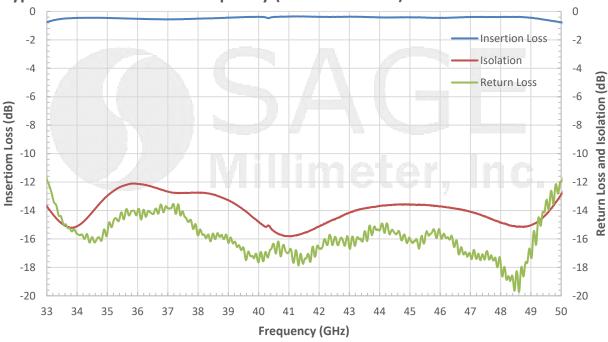
Item	Specification	
RF Input and Output	WR-22 Waveguide with UG-383/U Anti-Cocking Flange	
Body Material	Aluminum	
Finish	Gold Plated and Black Anodized	
Size	1.20" (W) x 1.40" (L) x 1.20" (H)	
Outline	NW-CQ-A	



Rev 1.0

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Typical Performance vs. Frequency (Port 1 to Port 2)



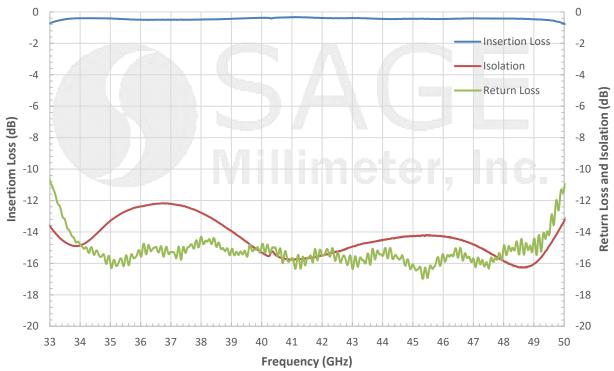
Typical Performance vs. Frequency (Port 2 to Port 3)



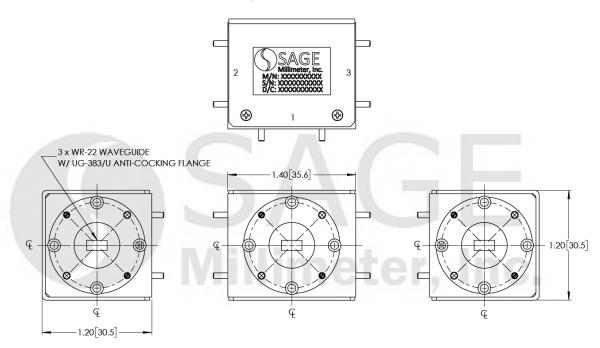


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Typical Performance vs. Frequency (Port 3 to Port 1)



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])







Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit slightly.
- All testing was performed under +25 °C case temperature.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

Caution:

- Exceeding absolute maximum ratings will damage the device.
- This device is magnetic sensitive. Keep the device at least 6" away from magnetic fields.
- Any foreign objects in the waveguide will degrade the performance and/or damage the device.



