SNW-9831041018-10-CJ

W Band Waveguide Junction Circulator, 98 to 104 GHz

SNW-9831041018-10-CJ is a W band waveguide junction circulator that covers the frequency range of 98 to 104 GHz. The circulator is a key component in any radar and communication system where the duplexing functions are required. The waveguide junction circulator is designed and manufactured to provide a low insertion loss of 1.0 dB and an isolation of 18 dB. The compact dimension guarantees the compact system integration. The input and output ports are WR-10 waveguides with UG-387/U-M anti-cocking flanges. Various configurations and frequency ranges are offered under different model numbers.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	98 GHz		104 GHz
Insertion Loss		1.0 dB	1.5 dB
Isolation	14 dB	18 dB	
Return Loss	13 dB	16 dB	
Forward Power Handling		2 W (CW)	3 W (CW)
Reverse Power Handling			3 W (CW)
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	WR-10 Waveguide with UG-387/U-M Anti-Cocking Flange
Body Material	Aluminum
Finish	Gold Plated
Cover Finish	Black Anodized
Weight	0.8 Oz
Size	1.0” (L) x 1.0” (W) x 0.85” (H)
Outline	NW-CW-A

ECCN

EAR99

FEATURES

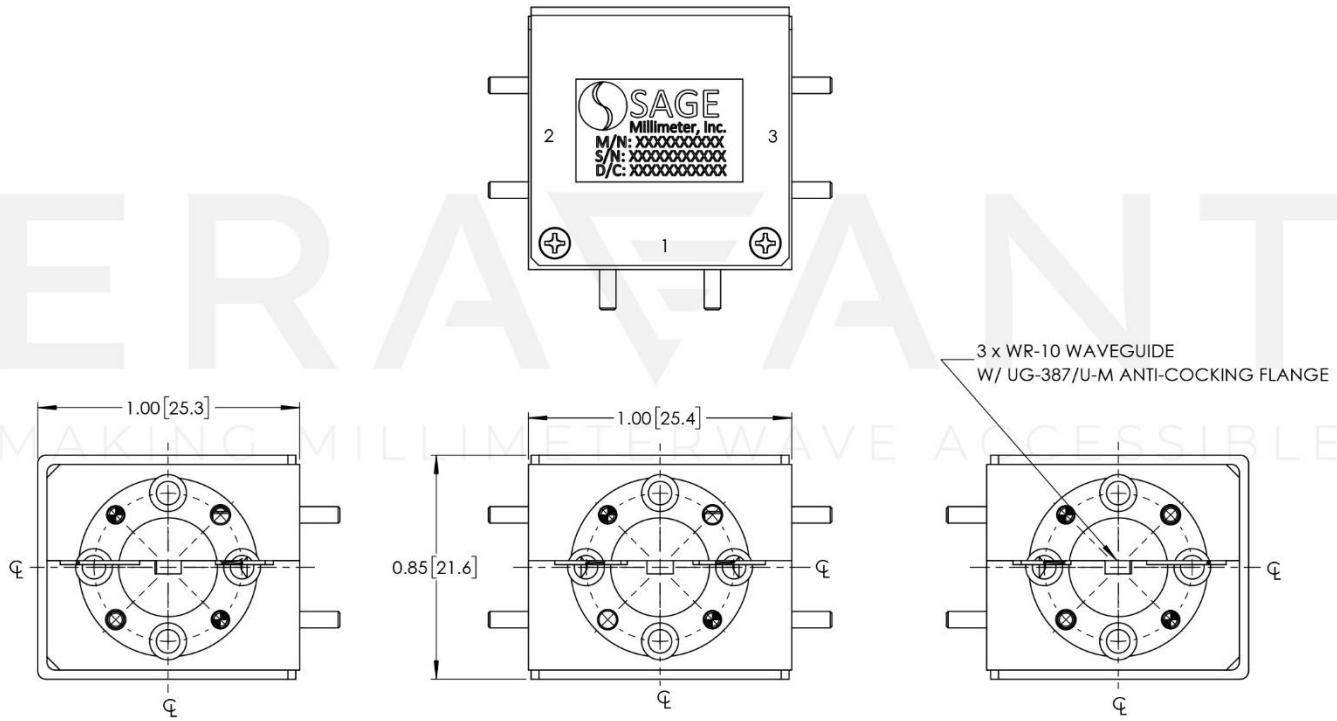
- Low Insertion Loss
- Moderate Isolation
- Compact Configuration

APPLICATIONS

- Radar Systems
- Module Integration
- TX/RX Duplexing
- Port Isolation

SUPPLEMENTAL DETAILS

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 from unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- 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 cause performance degradation and possible device damage.