

## Wide Band Coaxial Isolator 450 – 550MHz



Note: Photo is for illustration only.  
Please refer to the outline drawing.

### Features

- High power handling up to 10W
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

### Typical Applications

- Aerospace and military applications
- Test and Measurement
- Wireless infrastructure

### Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

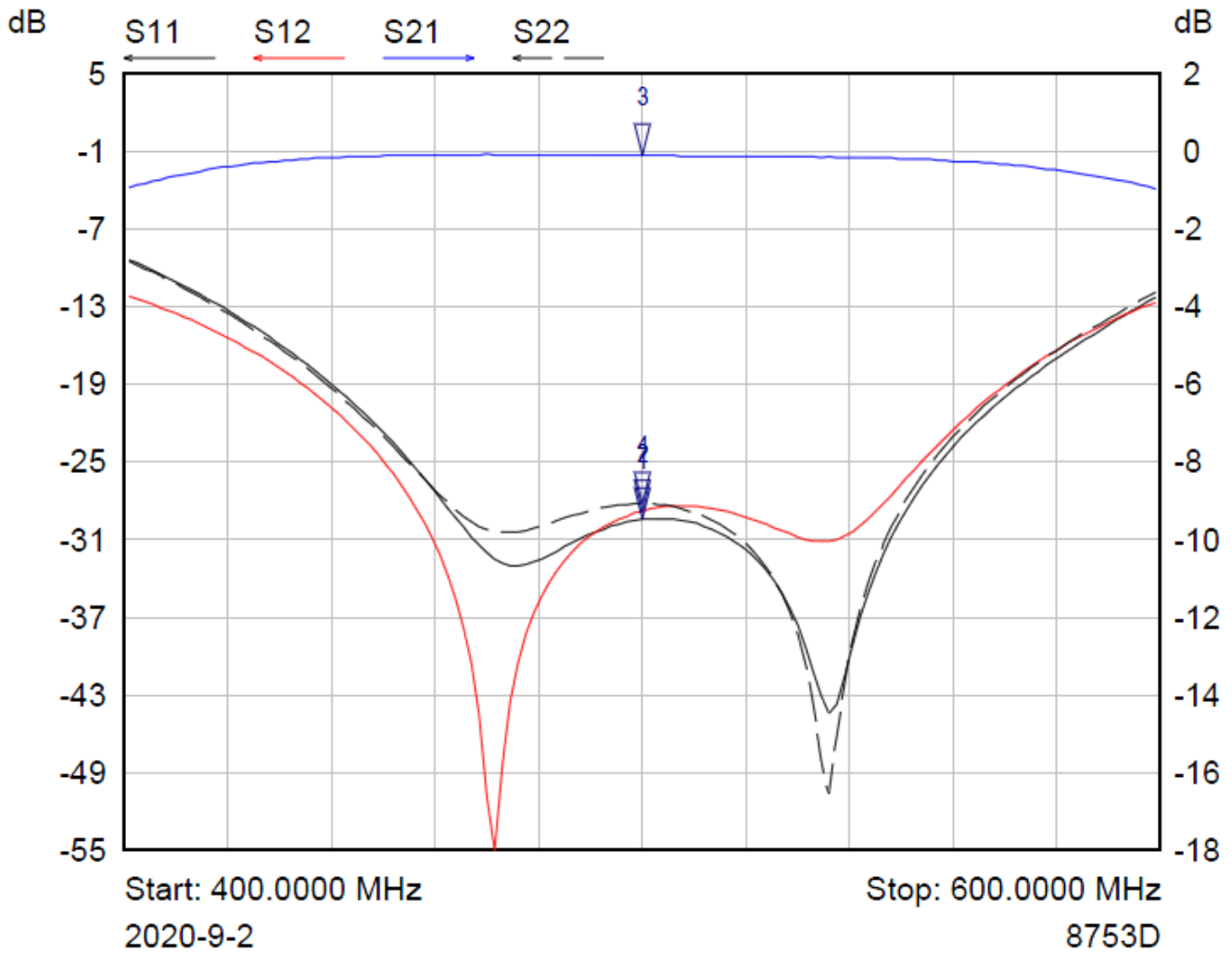
Parameter	Min.	Typ.	Max.	Units
Frequency Range	450 – 550			MHz
Insertion Loss			0.5	dB
Reverse Isolation (Note 1)	20			dB
VSWR			1.25	:1
Forward Power (CW)			10	W
Reverse Power (CW)			1	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Connectors	RFL101M450M550N (N-Female) RFL101M450M550S (SMA-Female)			
Impedance	50			$\Omega$
<p>Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation &amp; lower insertion loss</p> <p>Bandwidth (5 ~10) % x Center Frequency (Isolation &gt;19dB)</p> <p>Bandwidth (20~30) % x Center Frequency (Isolation &gt;18dB)</p> <p>Bandwidth (40~60) % x Center Frequency (Isolation &gt;17dB)</p> <p>Ask manufacturer for details</p>				

**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-20°C~+60°C
Storage Temperature	-40°C~+80°C
Thermal Shock	-20°C → +60°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +60°C for 72 Hours
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

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Typical Performance Plots

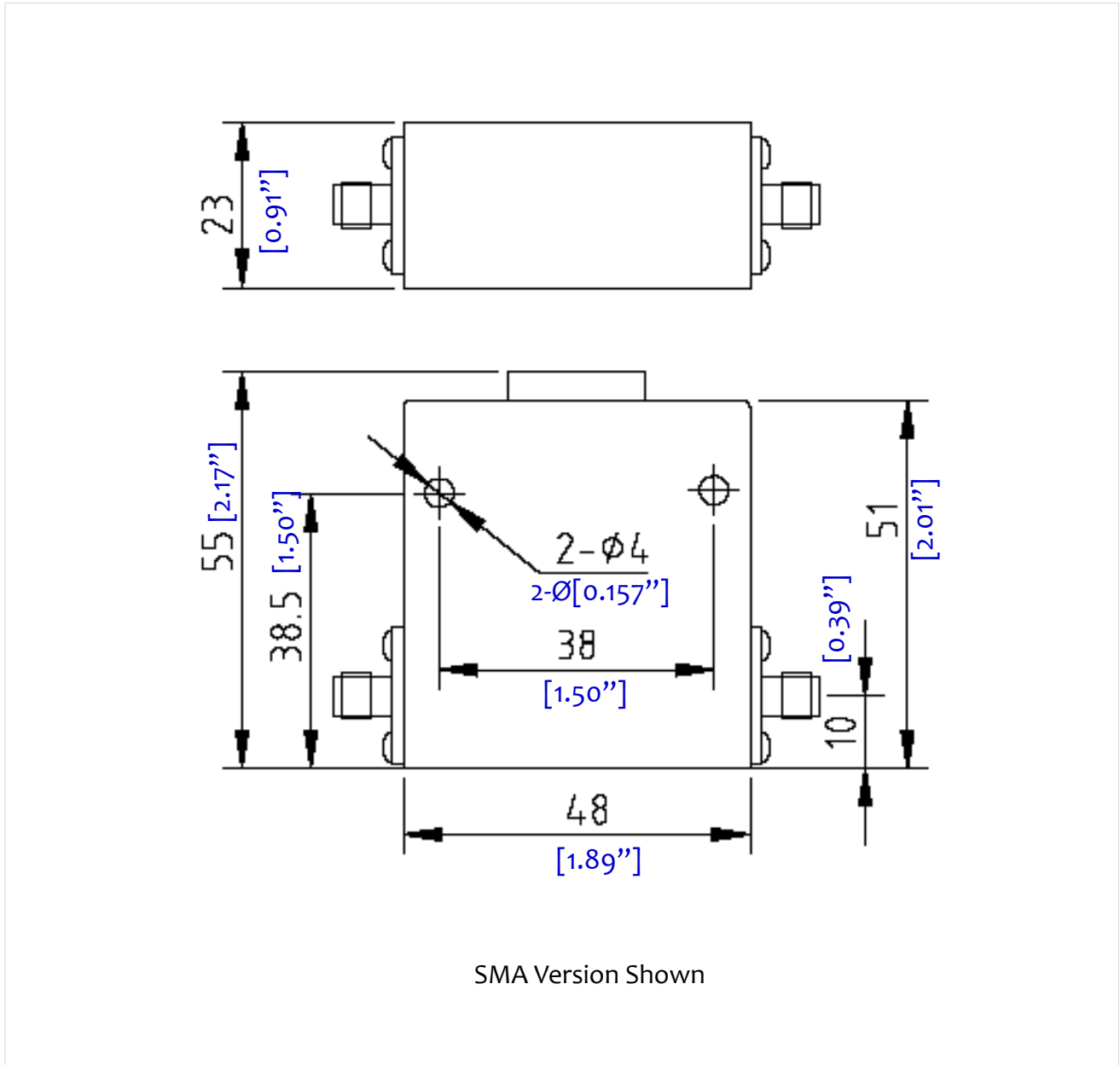


Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	500.0000 MHz	-29.41 dB	
2 ▾	S12	500.0000 MHz	-28.77 dB	
3 ▾	S21	500.0000 MHz	-0.12 dB	
4 ▾	S22	500.0000 MHz	-28.23 dB	

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**Outline Drawing:**

All Dimensions in mm [inches]



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**Important Notice**

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