

# Ultra Wide Band Coaxial Isolator $1.5 \sim 2.5 \, \text{GHz}$



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



#### **Features**

- High power handling up to 50W
- · 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, $T_A=25$ °C

Parameter	Min.	Тур.	Max.	Units	
Frequency Range	1.5- 2.5 GHz				
Insertion Loss			0.50	dB	
Isolation (Note 1)	18			dB	
VSWR			1.29	:1	
Forward Power (CW)			50	w	
Reverse Power (CW)			5	w	
Rotation	Clockwise (Standard) Counter Clockwise (Upon Request)				
Input / Output Connectors	SMA–Female				
Finish	Nickel Plated				
Case Material	Aluminum Alloy				
Impedance	50 Ω				

Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss

Bandwidth (5 ~10) % x Center Frequency (Isolation >23dB)

Bandwidth (20~30) % x Center Frequency (Isolation >20dB)

Bandwidth (40~60) % x Center Frequency (Isolation >18dB)

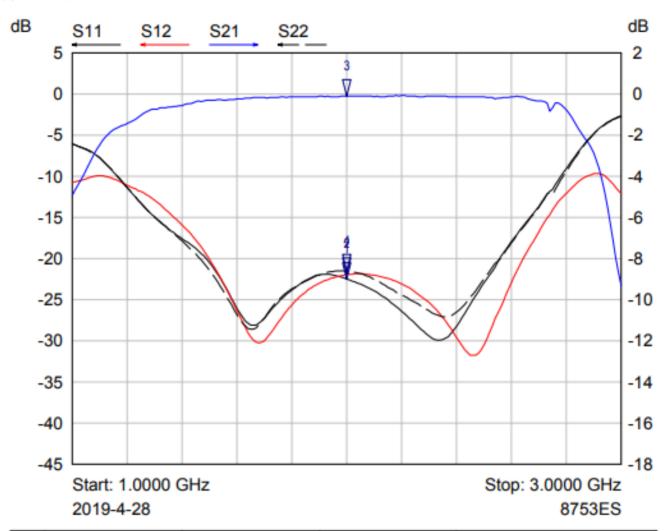
Ask manufacturer for details



## **Environmental Specifications and Test Standards**

Parameter	Standard	Description
Operational Temperature		-40°C~+70°C
Storage Temperature		-40°C~+85°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration	MIL-STD-39016	Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°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	MIL-STD-883 (For Hermetically Sealed Units)

## **Typical Performance Plots**

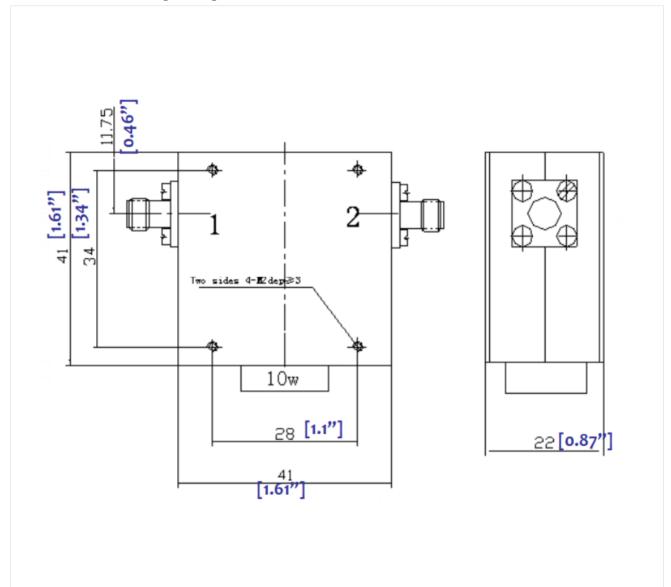


Mkr	Trace	X-Axis	Value	Notes
1 ₹	S11	2.0000 GHz	-22.47 dB	
2 ₹	S12	2.0000 GHz	-21.94 dB	
3 ₹	S21	2.0000 GHz	-0.11 dB	
4 ₹	S22	2.0000 GHz	-21.51 dB	



## **Outline Drawing:**

All Dimensions in mm [inches]



#### **Important Notice**

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