

## High Isolation Dual Junction Coaxial Isolator 8 - 10GHz



### Features

- High Isolation
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

### Typical Applications

- Aerospace and military applications
- Wireless Infrastructure
- Test & Measurement

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

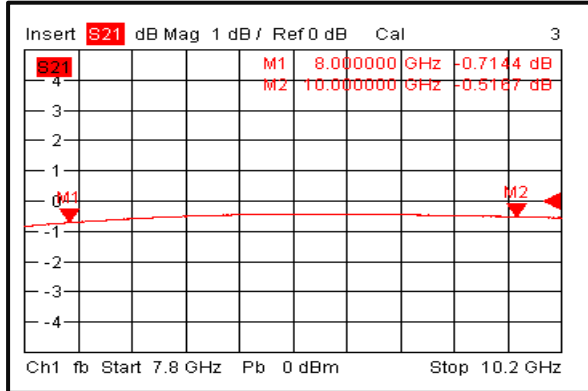
Parameter	Min.	Typ.	Max.	Units
Frequency Range	8-10			GHz
Insertion Loss		0.9	1.0	dB
Isolation (Note 1)	40	42		dB
VSWR		1.20	1.25	:1
Forward Power			10	W
Reverse Power			2	W
Rotation	Clockwise			
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Case Material	Aluminum Alloy			
Weight	0.8 Max.			Ounces
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;43dB)</p> <p>Bandwidth (20~30) % x Center Frequency (Isolation &gt;42dB)</p> <p>Bandwidth (40~60) % x Center Frequency (Isolation &gt;41dB)</p> <p>Ask manufacturer for details</p>				

**Environmental Specifications and Test Standards**

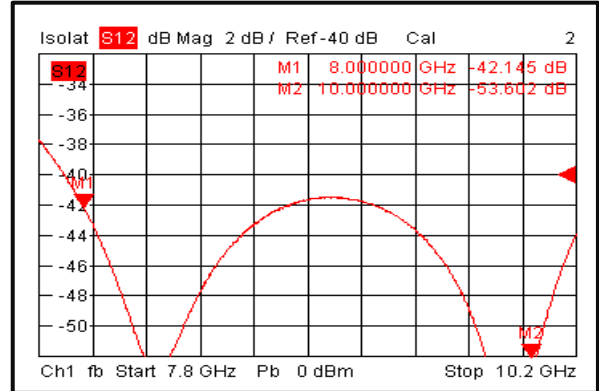
Parameter	Description
Operational Temperature	-20°C~+70°C (Case Temperature)
Storage Temperature	-40°C~+85°C
Thermal Shock	-20°C~+70°C (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +70°C for 72 Hours
Shock	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)

Typical Performance Plots

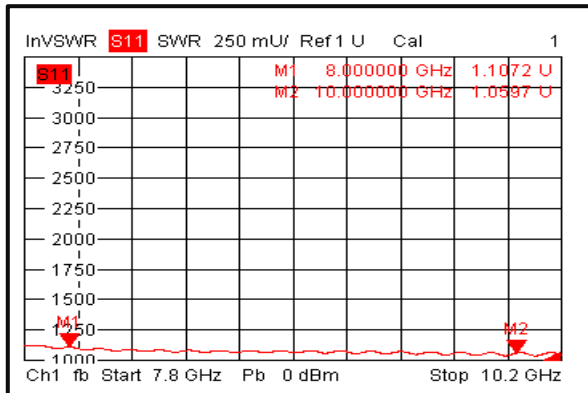
**Insertion Loss**



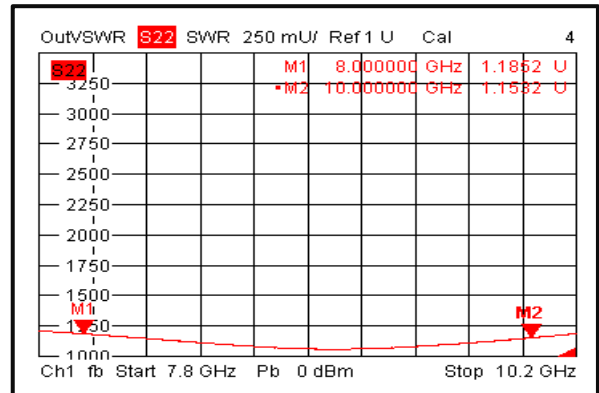
**Isolation**



**VSWR1**



**VSWR2**

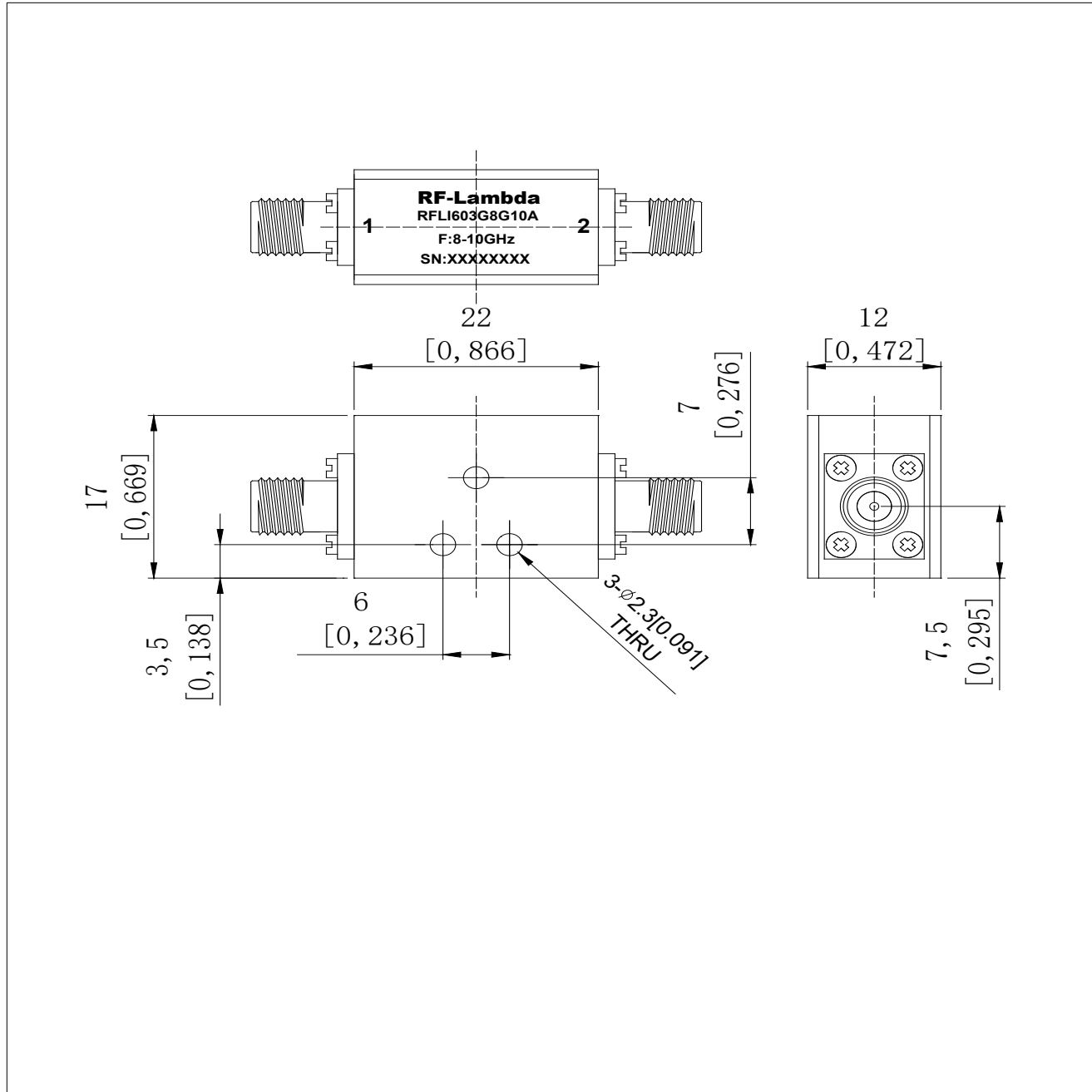


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**Outline Drawing:**

All Dimensions in mm [inches]

Tolerance  $\pm 0.25$  [0.01]



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