



High Isolation Coaxial Isolator 8 - 10GHz



Features

- High Isolation
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation
- 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 (CW)			10	W
Reverse Power (CW)			2	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Case Material	Aluminum Alloy			
Weight		0.71		Ounces
Impedance		50		Ω
<p>Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss</p> <p>Bandwidth (5 ~10) % x Center Frequency (Isolation >50dB)</p> <p>Bandwidth (20~30) % x Center Frequency (Isolation >45dB)</p> <p>Bandwidth (40~60) % x Center Frequency (Isolation >40dB)</p> <p>Ask manufacturer for details</p>				

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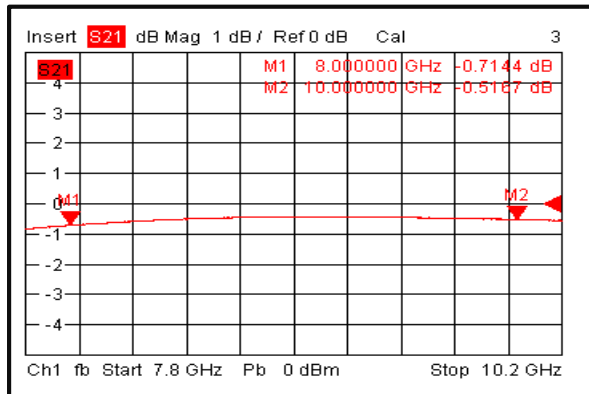


Environmental Specifications and Test Standards

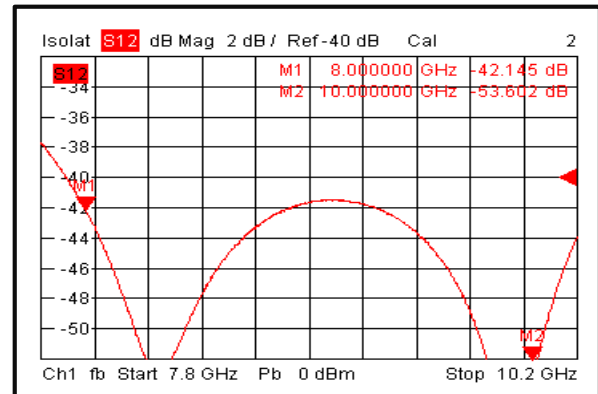
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-40°C~+80°C
Storage Temperature		-45°C~+85°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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

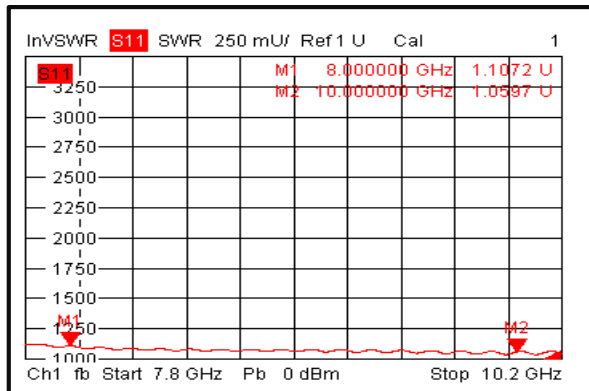
Insertion Loss



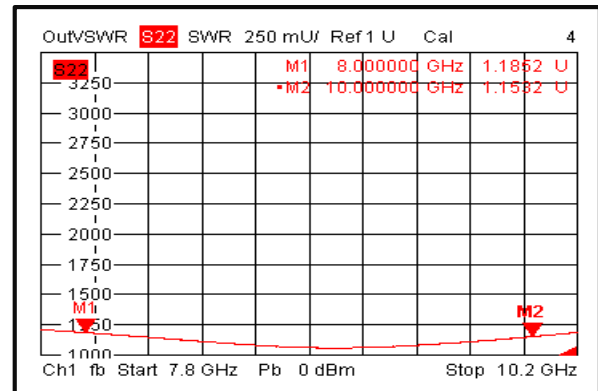
Isolation



VSWR 1



VSWR2

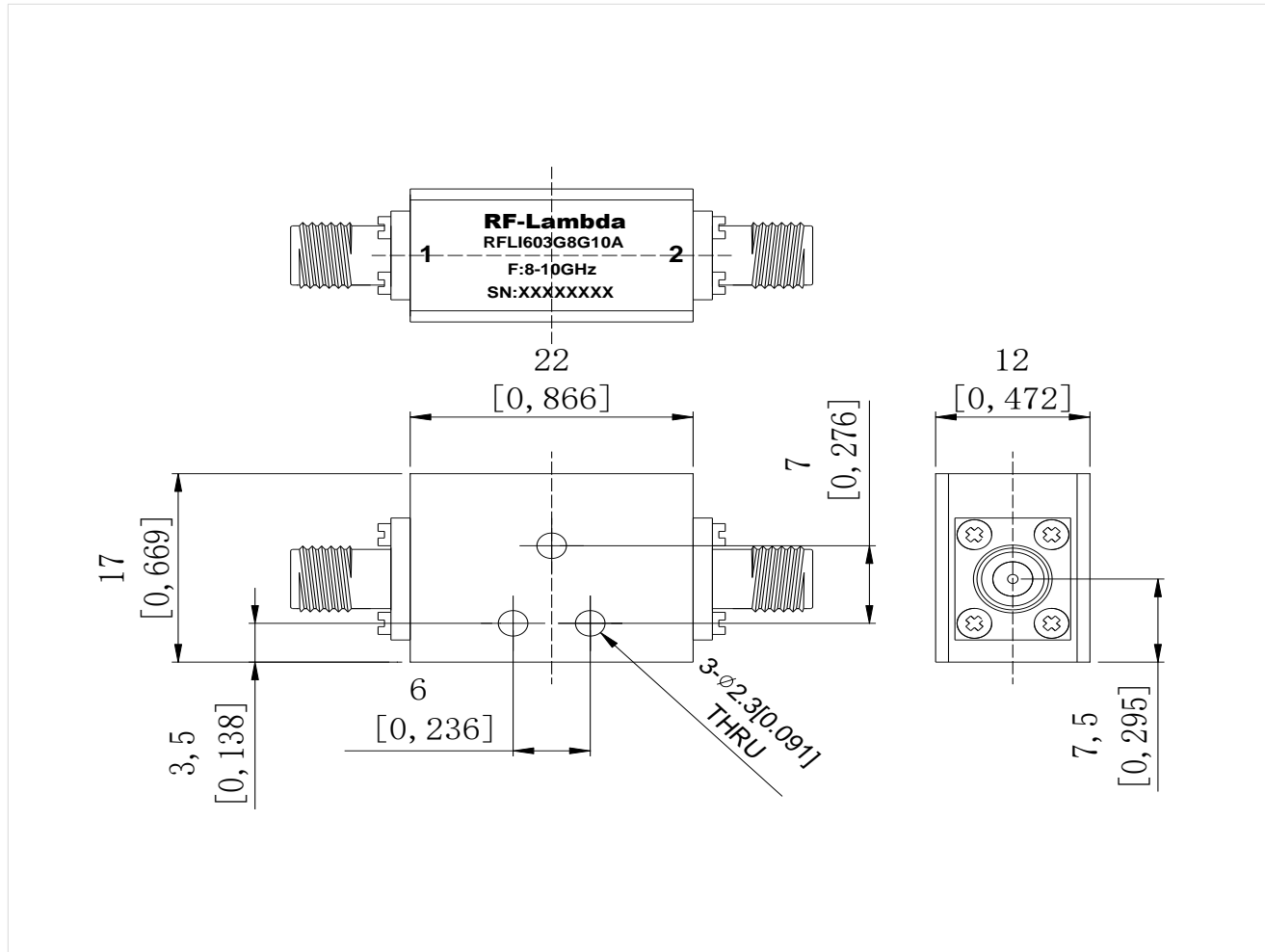




Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



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