

High Isolation Coaxial Isolator 1.145-1.195 GHz



Features

- High power handling up to 30W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- All specifications can be modified upon request

Typical Applications

- · Aerospace and military applications
- LMDS multi-carrier operation

Electrical Specifications, $T_A=25$ °C

Parameter	Min.	Тур.	Max.	Units
Frequency Range	1.145-1.195 GHz			
Insertion Loss		0.50	0.60	dB
Isolation (Note 1)	50	52		dB
VSWR		1.10	1.15	:1
Forward Power (CW)			30	w
Reverse Power (CW)			1	w
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Case Material	Aluminum alloy			
Weight	3.88 ounces			
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 >53dB)

Bandwidth (20~30) % x Center Frequency (Isolation >52dB)

Bandwidth (40~60) % x Center Frequency (Isolation >51dB)

Ask manufacturer for details

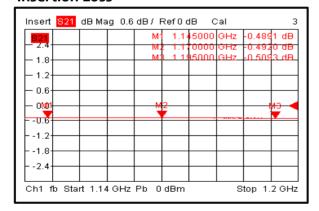


Environmental Specifications and Test Standards

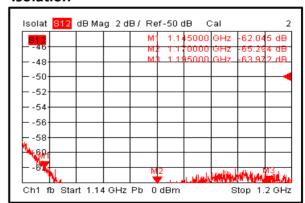
Parameter	Standard	Description	
Operational Temperature		-40°C~+80°C	
Storage Temperature		-55°C~+125°C	
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)	
Random Vibration	MIL-STD-39016	Acceleration Spectral Density 6 (m/s) Total 92.6 RMS	
Electrical & Temperature Burn In		Temperature +85°C for 72 Hours	
Shock		 Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 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

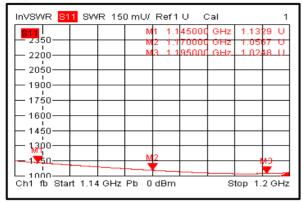


Isolation

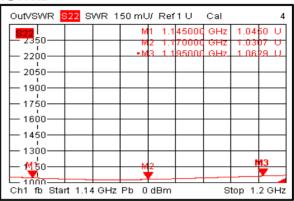




VSWR₁

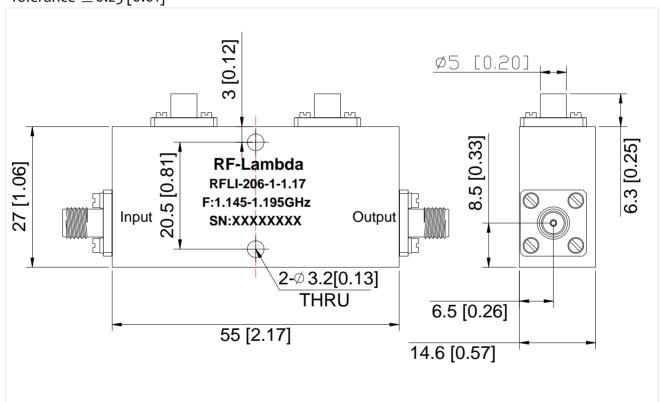


VSWR₂



Outline Drawing:

All Dimensions in mm [inches] Tolerance ± 0.25 [0.01]



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