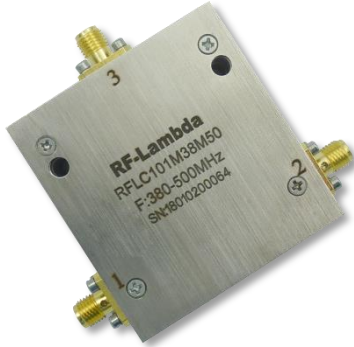




Ultra Wide Band Coaxial Circulator 380 – 500MHz



Features

- High power handling up to 100W
- 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, $T_A=25\text{ }^\circ\text{C}$

Parameter	Min.	Typ.	Max.	Units
Frequency Range	380		500	MHz
Insertion Loss		0.30	0.40	dB
Isolation	20	21		dB
VSWR		1.25	1.30	:1
Forward Power (CW)			100	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Connectors	SMA-Female			
Finish	Nickel Plated			
Case Material	Aluminum Alloy			
Weight		8.47		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 >23dB)
 Bandwidth (20~30) % x Center Frequency (Isolation >22dB)
 Bandwidth (40~60) % x Center Frequency (Isolation >21dB)
 Ask manufacturer for details

Ultra Wide Band Coaxial Circulator 380-500MHz

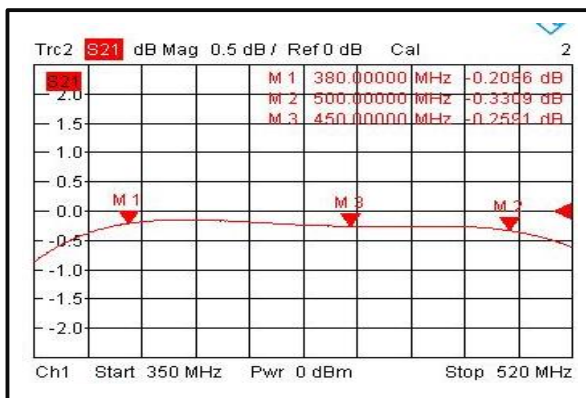


Environmental Specifications and Test Standards

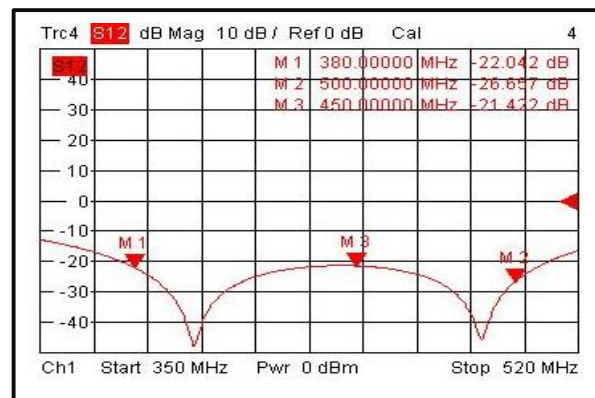
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+70°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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



Ultra Wide Band Coaxial Circulator 380-500MHz

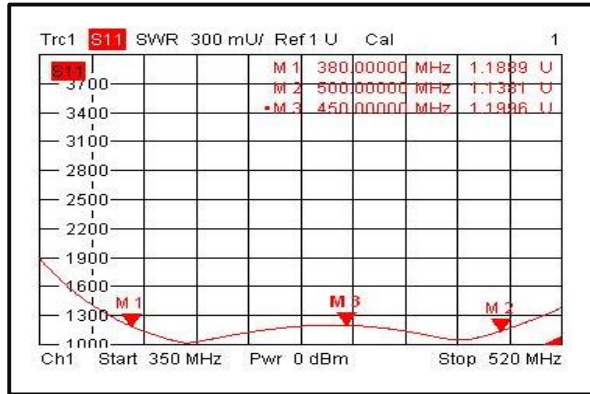


RF-LAMBDA

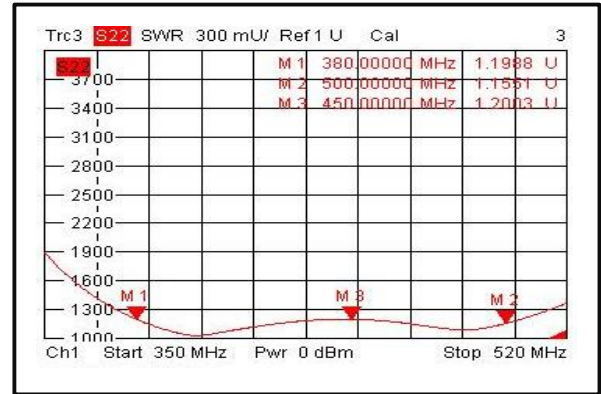
LEADER OF RF BROADBAND SOLUTIONS

RFLC101M38M50

VSWR1



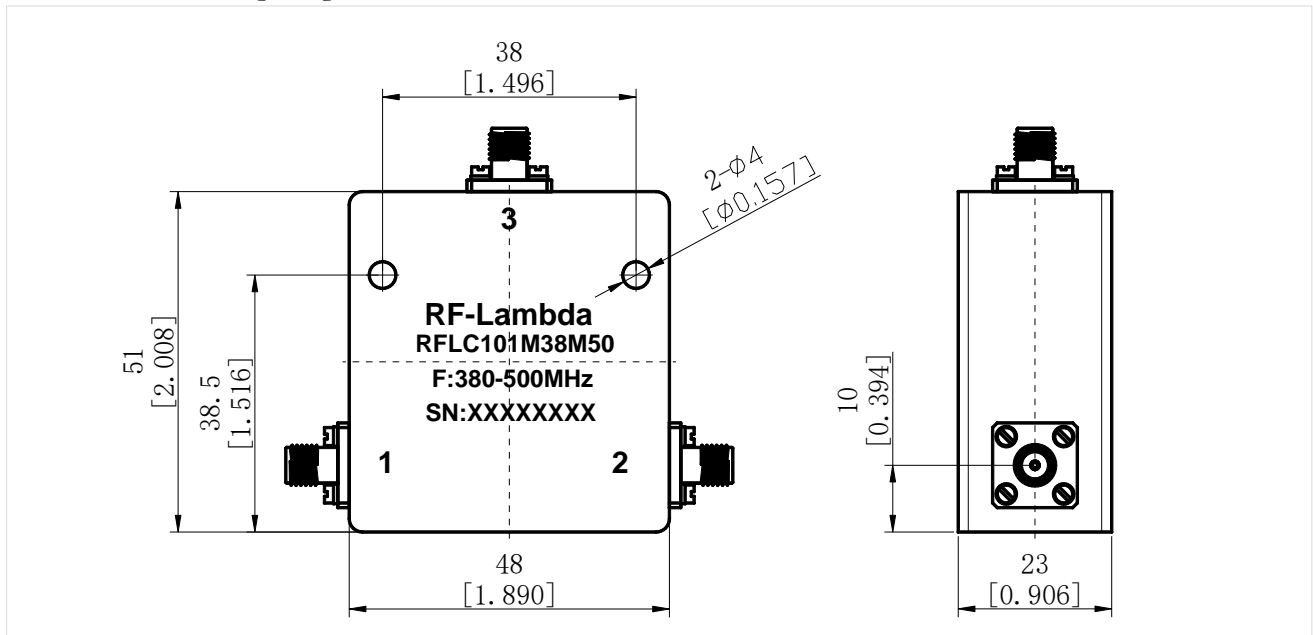
VSWR2



Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.25 [0.01]



Important Notice

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Ultra Wide Band Coaxial Circulator 380-500MHz