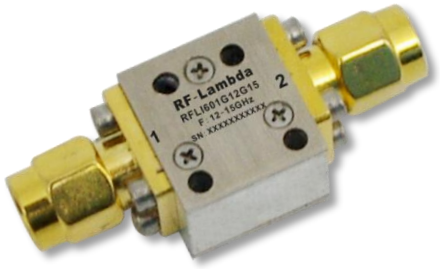
# Wide Band Coaxial Isolator
# 12 - 15GHz




RoHS Compliant

## *Features*

- High power handling up to 10W
- Wide band operation
- 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 ℃*

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | | 12-15 | | GHz |
| Insertion Loss | | 0.30 | 0.4 | dB |
| Isolation (Note 1) | 21 | 22 | | dB |
| VSWR | | 1.25 | 1.30 | :1 |
| Forward Power (CW) | | | 10 | W |
| Reverse Power (CW) | | | 1 | W |
| Rotation | Clockwise (Standard)<br>Counter Clockwise (upon request) | | | |
| Input /Output Connector | SMA-male | | | |
| Finishing | Nickel plating | | | |
| Case Material | Aluminum alloy | | | |
| Weight | / | | | 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 >21dB)
Bandwidth (40~60) % x Center Frequency (Isolation >20dB)
Ask manufacturer for details

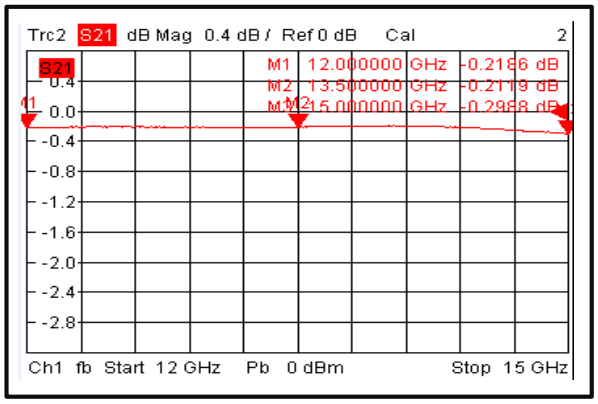
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## *Environmental Specifications and Test Standards*

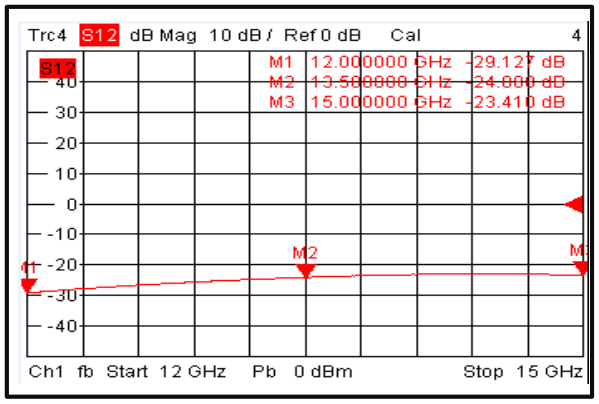
| Parameter | Standard | Description |
|---|---|---|
| Operational Temperature | MIL-STD-39016 | -40℃~+70℃ |
| Storage Temperature | | -40℃~+85℃ |
| Thermal Shock | | 1 Hour@ -45℃ → 1 Hour @ +85℃ (5 Cycles) |
| Random Vibration | | Acceleration Spectral Density 6 (m/s)<br>Total 92.6 RMS |
| Electrical & Temperature Burn In | | Temperature +85℃ for 72 Hours |
| Shock | | 1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude | | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>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*

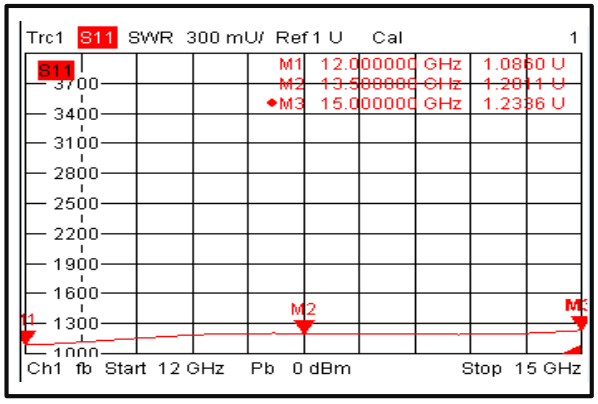
### Insertion Loss



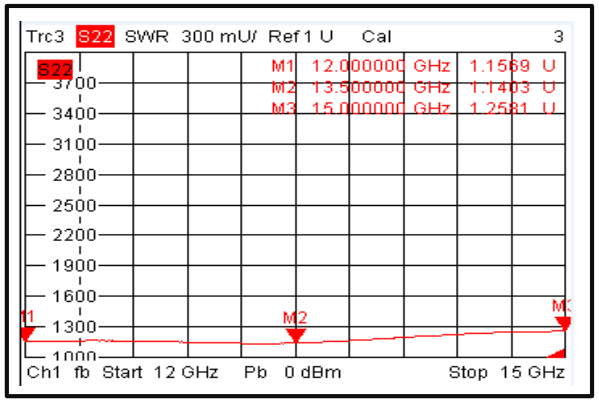

### Isolation




### VSWR 1



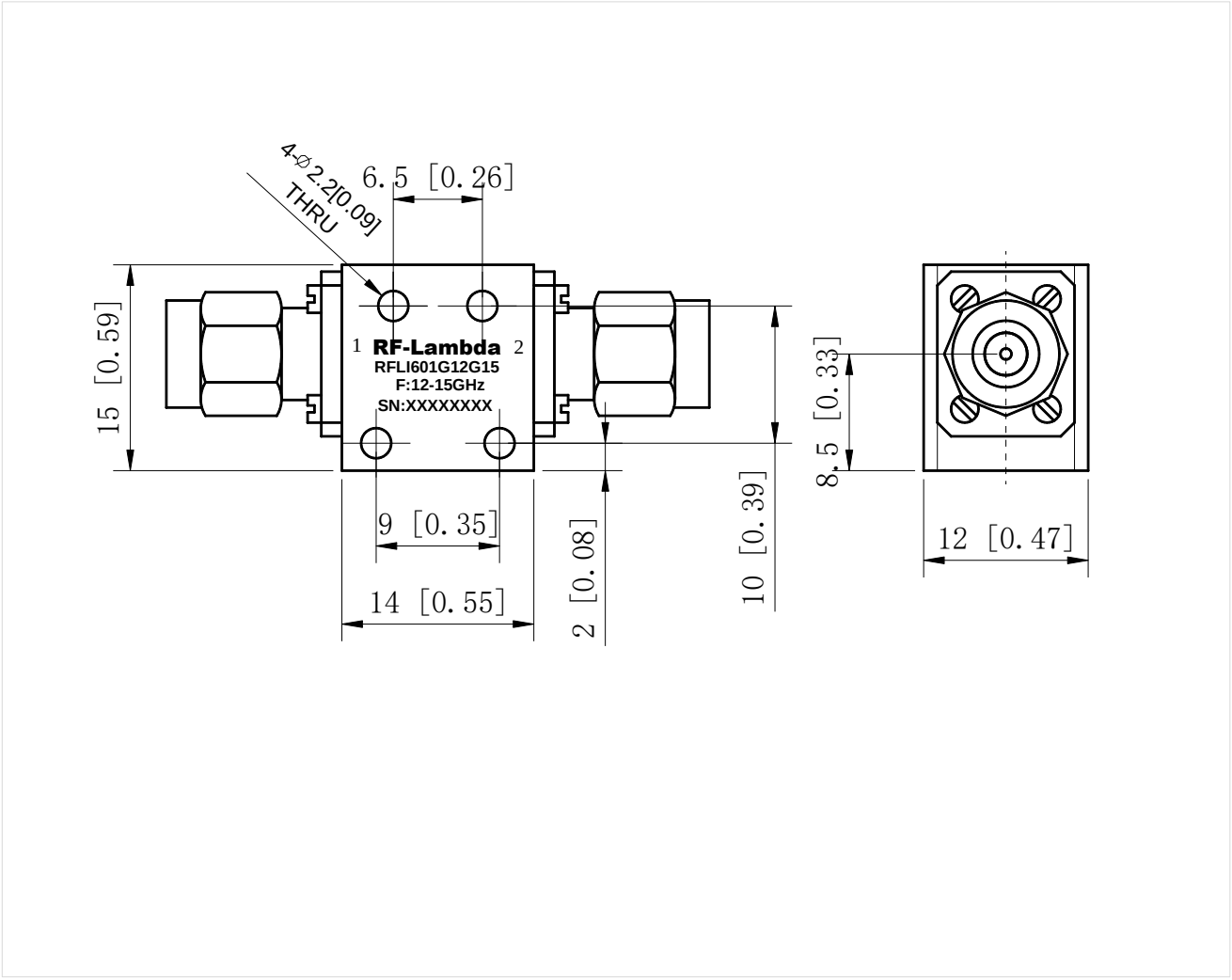

### VSWR2




Wide Band Coaxial Isolator 12 - 15GHz

## Outline Drawing:

All Dimensions in mm [inches]




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