

High Power Circulator 89 ~ 99MHz

Features

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

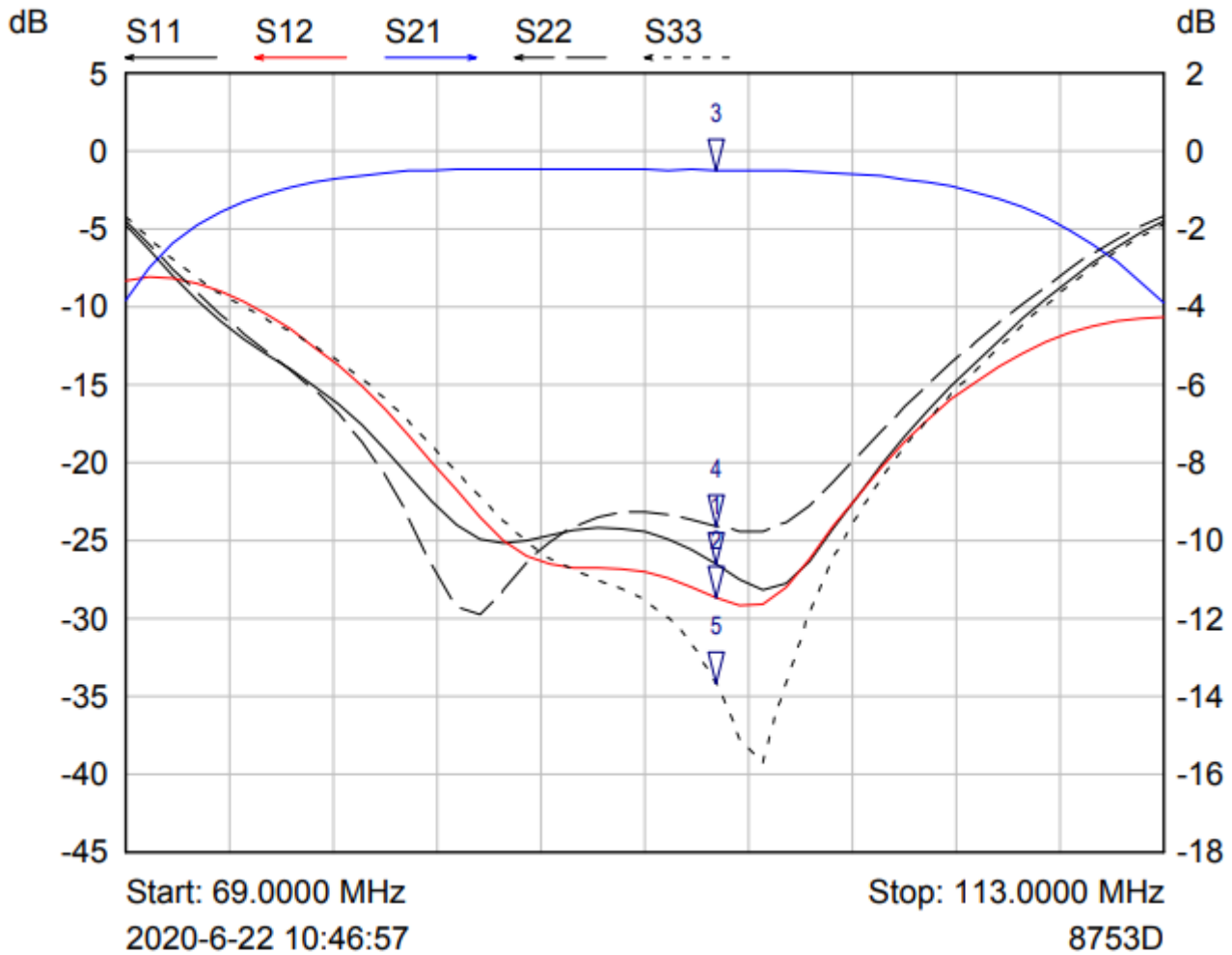
| Parameter | Min. | Typ. | Max. | Units |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|------|------|----------|
| Frequency Range | 89 - 99 | | | MHz |
| Insertion Loss | | | 0.9 | dB |
| Isolation | 20 | | | dB |
| VSWR | | | 1.25 | :1 |
| Forward Power (CW) | | | 100 | W |
| Rotation | Clockwise (Standard) Counter Clockwise (Upon Request) | | | |
| Input / Output Connectors | SMA or N or L16 | | | |
| Finish | Nickel Plated | | | |
| Case Material | Aluminum / Copper | | | |
| Impedance | 50 | | | Ω |
| <p>Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss</p> <p style="padding-left: 40px;">Bandwidth (5 ~10) % x Center Frequency (Isolation >24dB)</p> <p style="padding-left: 40px;">Bandwidth (20~30) % x Center Frequency (Isolation >23dB)</p> <p style="padding-left: 40px;">Bandwidth (40~60) % x Center Frequency (Isolation >20dB)</p> <p style="padding-left: 40px;">Ask manufacturer for details</p> | | | | |

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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 +80°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

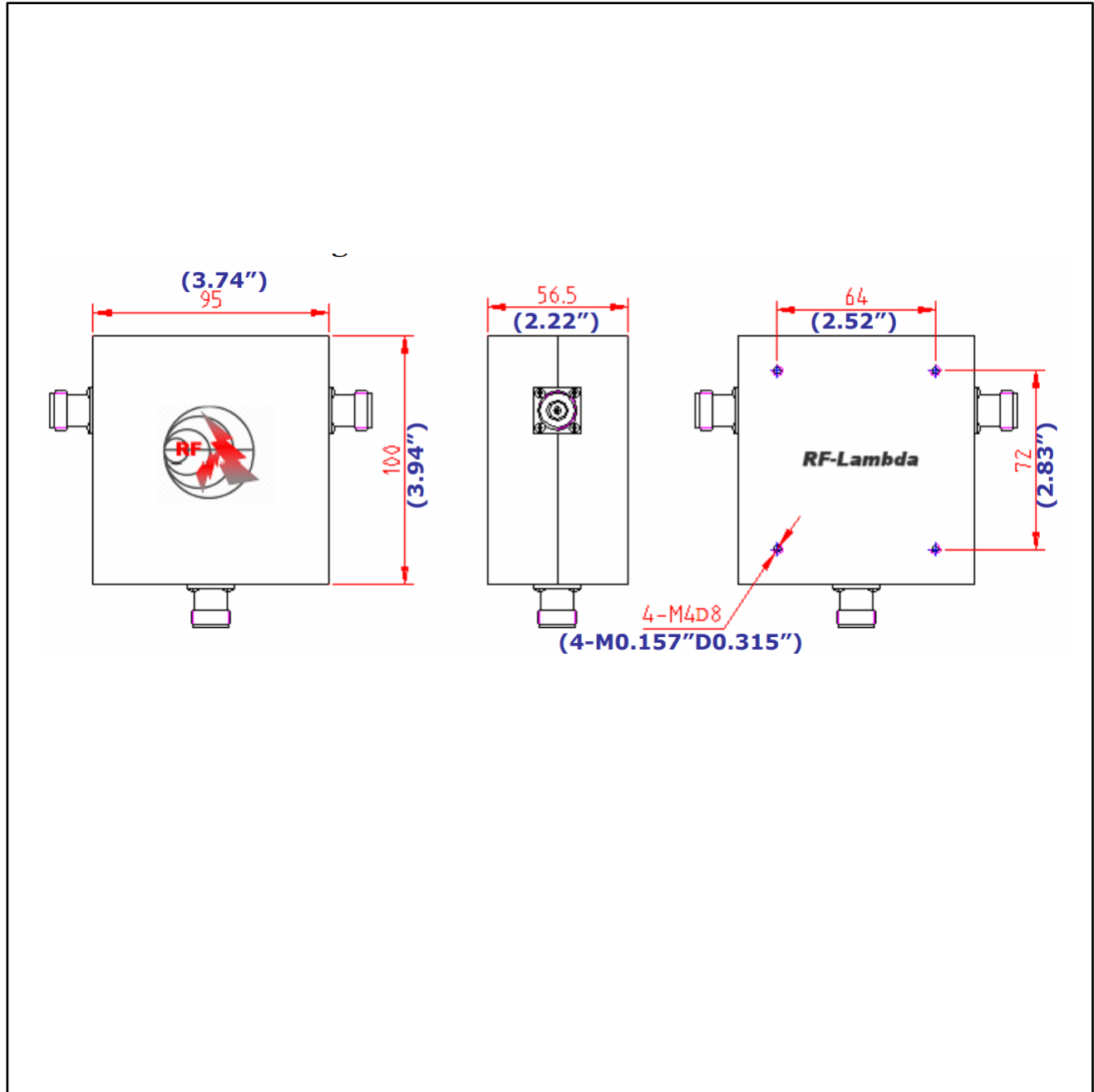


| Mkr | Trace | X-Axis | Value | Notes |
|-----|-------|-------------|-----------|-------|
| 1 ▾ | S11 | 94.0000 MHz | -26.49 dB | |
| 2 ▾ | S12 | 94.0000 MHz | -28.68 dB | |
| 3 ▾ | S21 | 94.0000 MHz | -0.49 dB | |
| 4 ▾ | S22 | 94.0000 MHz | -24.07 dB | |
| 5 ▾ | S33 | 94.0000 MHz | -34.15 dB | |

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Outline Drawing:

All Dimensions in mm [inches]



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