



Coaxial 10W 0° 8-Way Power Divider 5-500MHz



Features

- High power handling up to 10W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- High peak to average handling capability

Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

| Parameters | | Min. | Typ. | Max. | Units |
|---------------------------|---------------|------------|------|------|--------|
| Frequency Range | | 5 | | 500 | MHz |
| Nominal Splitter Loss | | | 9 | | dB |
| Insertion Loss | | | 1.8 | 2.0 | dB |
| Isolation | | 20 | 24 | | dB |
| Input VSWR | | | 1.3 | 1.5 | :1 |
| Output VSWR | | | 1.25 | 1.4 | :1 |
| Amplitude Imbalance | | | | ±0.3 | dB |
| Phase Imbalance | | | | ±2 | deg |
| Power Rating | Forward Power | 10 | | | W |
| | Reverse Power | 0.5 | | | W |
| | Peak Power | 100 | | | W |
| Impedance | | 50 | | | Ohms |
| Weight | | 16.23 | | | ounces |
| Input / Output Connectors | | N-Female | | | |
| Material | | Aluminum | | | |
| Finish | | Gray Paint | | | |

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Environmental Specifications and Test Standards

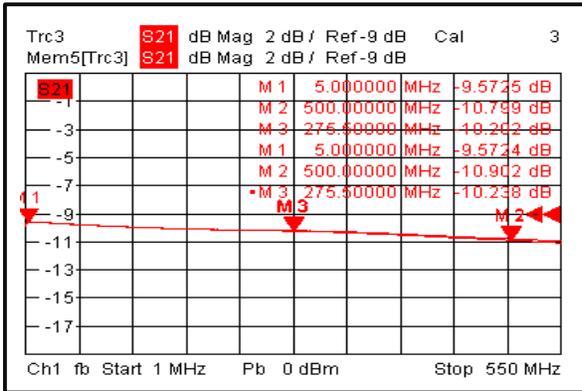
| Parameter | Standard | Description |
|----------------------------------|---------------|---|
| Operational Temperature | MIL-STD-39016 | -45°C~+85°C |
| Storage Temperature | | -55°C~+125°C |
| Thermal Shock | | 1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles) |
| Random Vibration | | Acceleration Spectral 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) |

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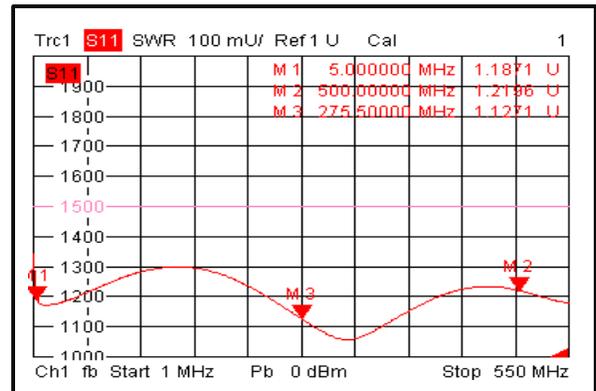


Typical Performance Plots

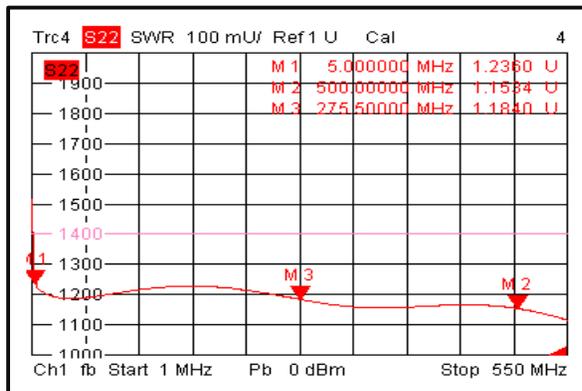
Loss & Amplitude Imbalance



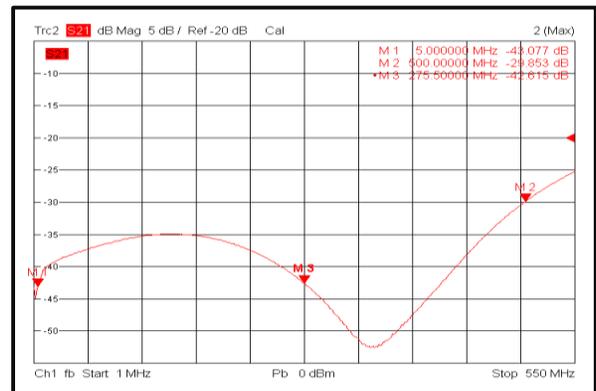
Input VSWR



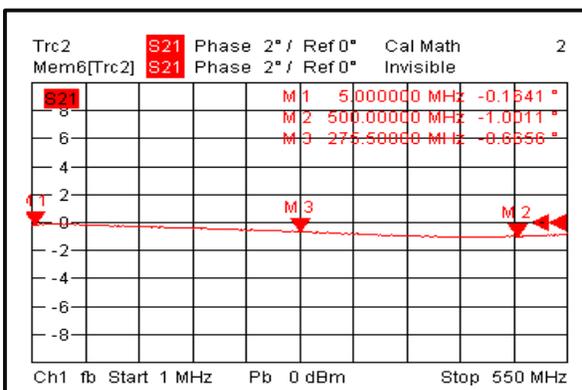
Output VSWR



Isolation



Phase Imbalance



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RF-LAMBDA

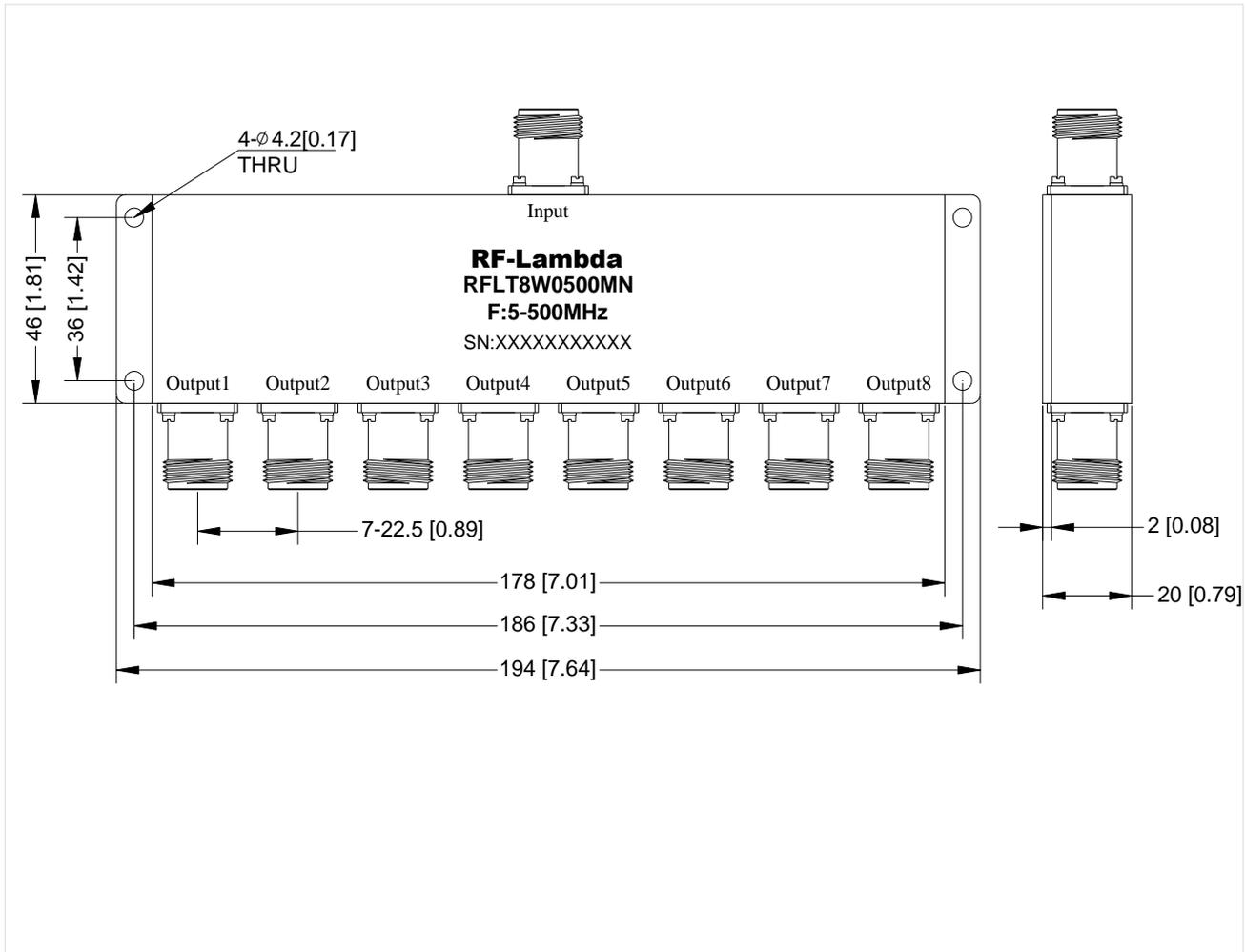
LEADER OF RF BROADBAND SOLUTIONS

RFLT8W0500MN

Outline Drawing:

All Dimensions in mm [inches]

Tolerance ± 0.3 [0.012]



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