

## Coaxial 40W 0° 3-Way Power Divider 0.5GHz-6GHz



### Product Description

RFLT3W0006G is 3-Way power divider with a frequency range of 0.5 to 6GHz.

The forward power of this power divider is 40W. The insertion loss is 1.8dB with a typical isolation of 20dB.

The working temperature of this product is between - 40°C and + 85°C.

### Features

- High power handling up to 40W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

### Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

### Electrical Specifications, TA = +25°C

Parameter	Min	Typ	Max	Units
Frequency Range	0.5		6	GHz
Nominal Splitter Loss		4.8		dB
Insertion Loss		1.5	1.8	dB
Isolation	18	20		dB
Input VSWR		1.4	1.5	: 1
Output VSWR		1.3	1.4	: 1
Amplitude Imbalance		±0.4	±0.5	dB
Phase Imbalance		±4	±6	deg
Power Rating	Forward Power		40	W
	Reverse Power		3	W
	Peak Power		500 (10% Duty Cycle, 1 us Pulse Width)	W
Weight		0.32		lbs
Impedance		50		Ω
Input / Output Connectors	SMA-Female(Input) – SMA-Female(Output)			
Package	Epoxy Sealed (Standard)			
	Hermetically Sealed (Optional)			

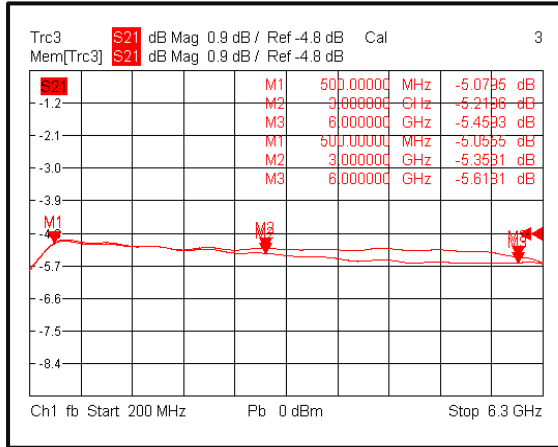
**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
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)

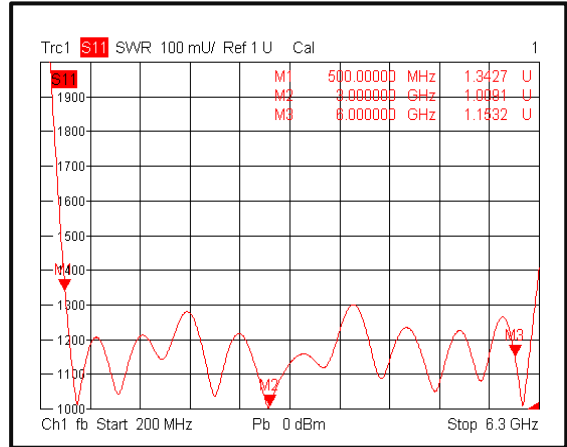
\*\*For vibration testing details please see additional information section.

Typical Performance Plots

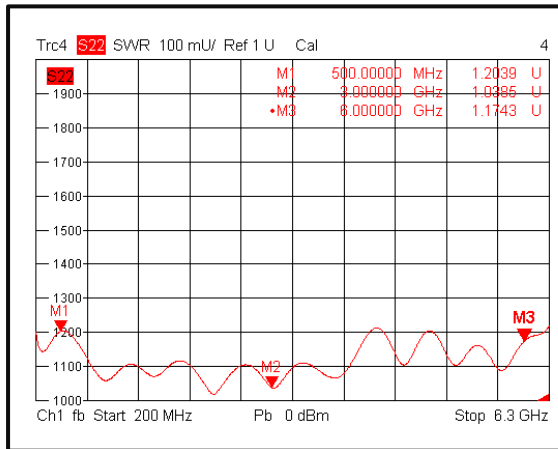
**Loss & Amplitude Imbalance**



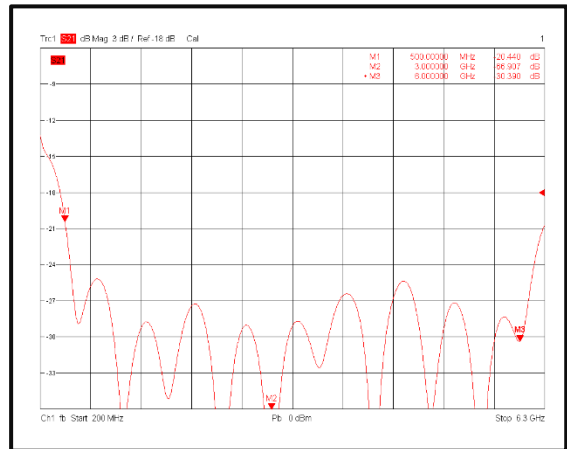
**Input VSWR**



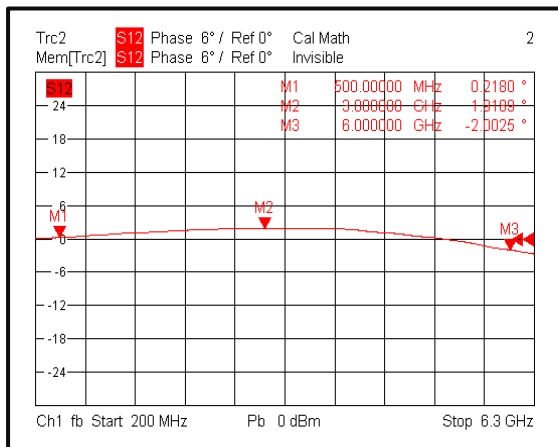
**Output VSWR**



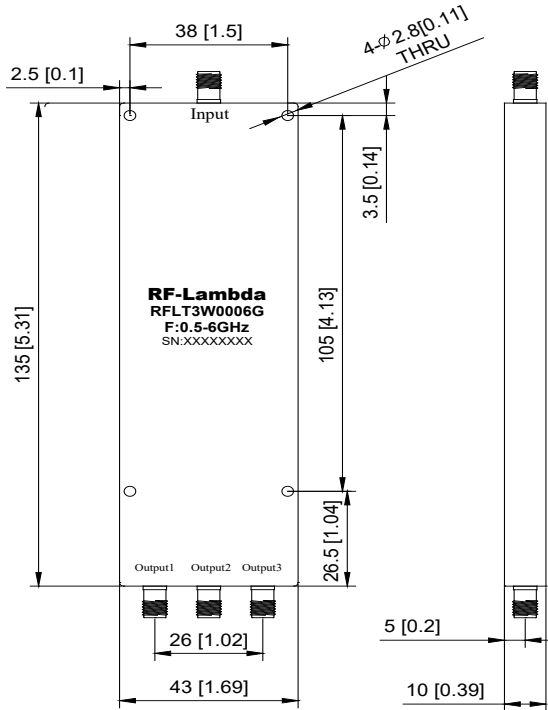
**Isolation**



**Phase Imbalance**



**Outline Drawing**



Notes:

1. Package Material: Aluminum
2. Finish: Painted
3. All dimensions are in millimeters [inches].
4. Outline Tolerances  $\pm 0.5$  [0.02], Mounting Hole Tolerances  $\pm 0.2$  [0.008] unless otherwise specified.



Additional Information

Documentation	Webpage
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Connector Torque Specifications

[https://www.rflambda.com/pdf/Torque\\_Specifications.pdf](https://www.rflambda.com/pdf/Torque_Specifications.pdf)

Random Vibration Test Standard

[https://www.rflambda.com/pdf/rflambda\\_random\\_vibration\\_MIL-STD-202G.pdf](https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf)

**Ordering Information**

Part Number	Modification	Description
RFLT3W0006G	standard	0.5-6GHz 3-Way Power Divider

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