

## Coaxial 30W 0° 4-Way Power Divider 0.5GHz-18GHz



### Product Description

RFLT4W5M18G is a 4-Way power divider with a frequency range of 0.5 to 18GHz.

The forward power of this power divider is 30W. The insertion loss is 2.0dB with a typical isolation of 19dB.

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

### Features

- High power handling up to 30W
- 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	Min	Typ	Max	Min	Typ	Max	Units
Frequency Range	0.5		1	1		8	8		18	GHz
Nominal Splitter Loss		6			6			6		dB
Insertion Loss		0.6	1.0		2.0	2.5		3.5	4.0	dB
Isolation	16	18		16	19		16	17		dB
Input VSWR		1.6	1.8		1.55	1.65		1.55	1.65	: 1
Output VSWR		1.3	1.4		1.4	1.5		1.4	1.5	: 1
Amplitude Imbalance		±0.2	±0.3		±0.3	±0.4		±0.4	±0.5	dB
Phase Imbalance		±3	±5		±3	±6		±6	±8	deg
Power Rating	Forward Power				30					W
	Reverse Power				1					W
	Peak Power				300 (10% Duty Cycle, 1us Pulse Width)					W
Weight				0.61 Max.						lbs
Impedance				50						Ω
Input / Output Connectors	SMA-Female(Input) –SMA-Female(Output)									
Package	Epoxy Sealed (Standard)									
	Hermetically Sealed (Optional)									

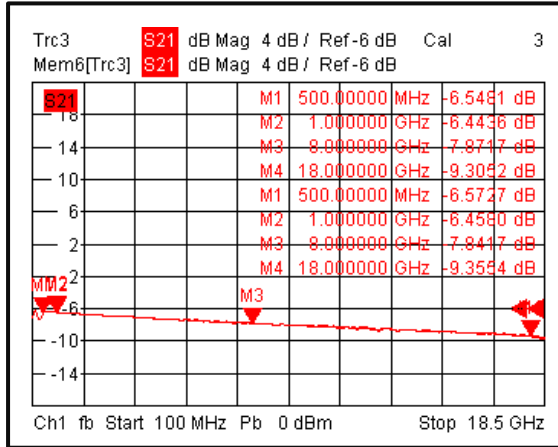
**Environmental Specifications and Test Standards**

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)

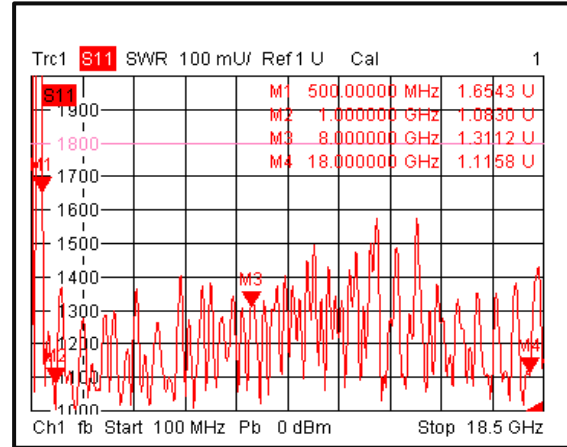
\*For vibration testing details please see additional information section.

Typical Performance Plots

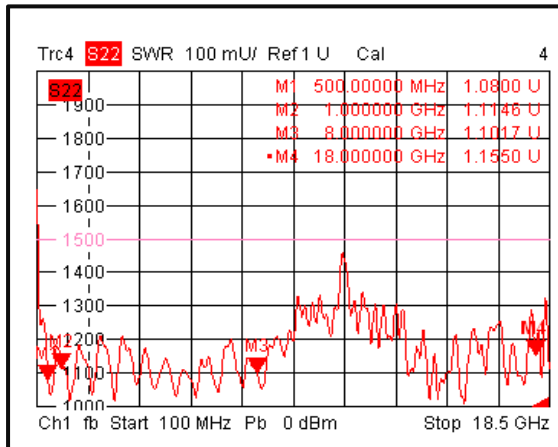
Loss & Amplitude Imbalance



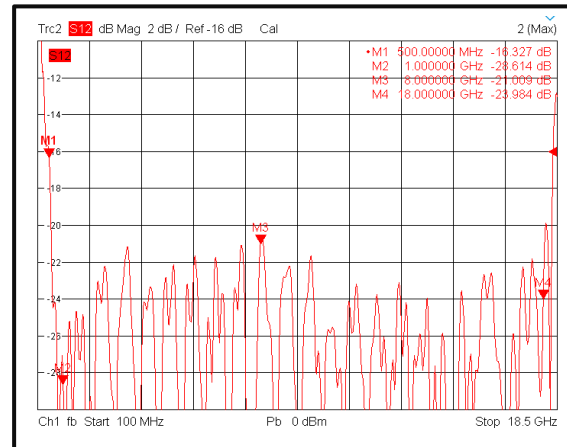
Input VSWR



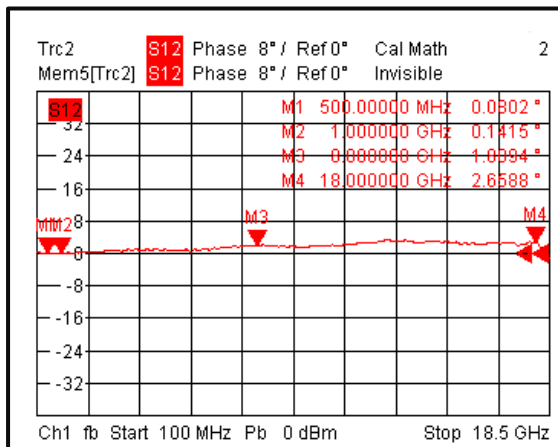
Output VSWR



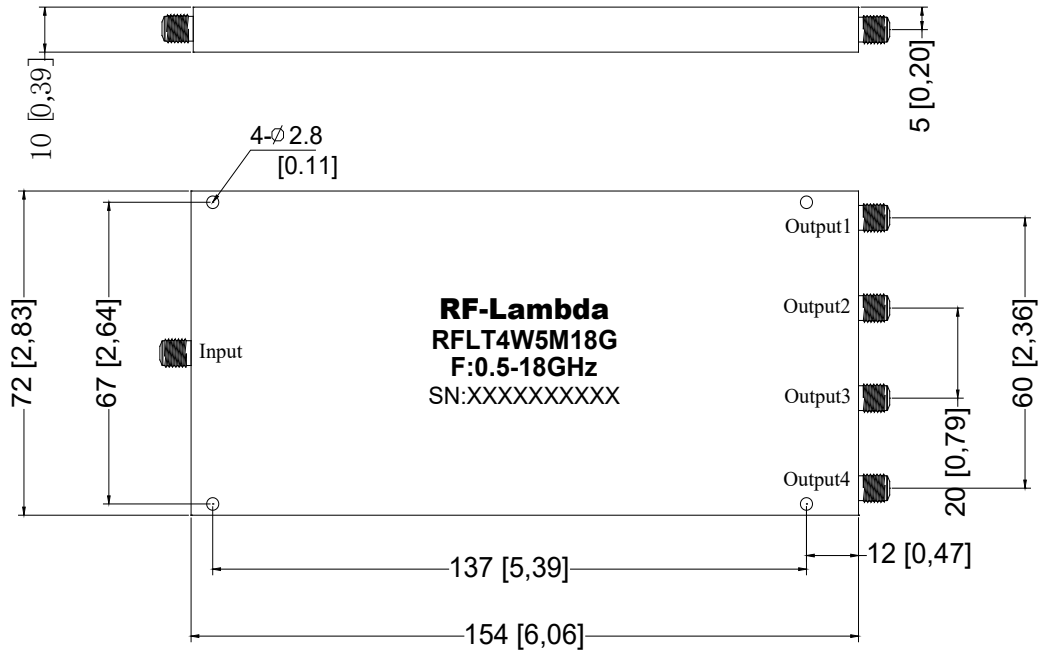
Isolation



Phase Imbalance



**Outline Drawing**



Notes:

1. Package Material: Aluminum
2. Finish: Blue 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
Connector Torque Specifications	<a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>
Random Vibration Test Standard	<a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a>

**Ordering Information**

Part Number	Modification	Description
RFLT4W5M18G	Standard	0.5-18GHz 4-Way Power Divider

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