

## Coaxial 20W 0° 2-Way Power Divider 0.5GHz-18GHz



### Product Description

RFLT2W5M18GB is a 2-Way power divider with a frequency range of 0.5 to 18GHz.

The forward power of this power divider is 20W. The insertion loss is 0.5dB 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 20W
- 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		3			3			3		dB
Insertion Loss		0.3	0.5		0.5	0.7		0.7	0.9	dB
Isolation	16	17		18	20		16	18		dB
Input VSWR		1.45	1.6		1.3	1.4		1.3	1.4	: 1
Output VSWR		1.3	1.4		1.3	1.4		1.3	1.4	: 1
Amplitude Imbalance		0.1	0.2		0.15	0.2		0.2	0.3	dB
Phase Imbalance		1	2		2	3		3	5	deg
Power Rating	Forward Power				20					W
	Reverse Power				1					W
	Peak Power				200 (10% Duty Cycle, 1 us Pulse Width)					W
Weight				0.26 Max.						lbs
Impedance				50						Ω
Input / Output Connectors	SMA-Female(Input) –SMA-Female(Output)									
Package	Epoxy Sealed (Standard)									
	Hermetically Sealed (Optional)									

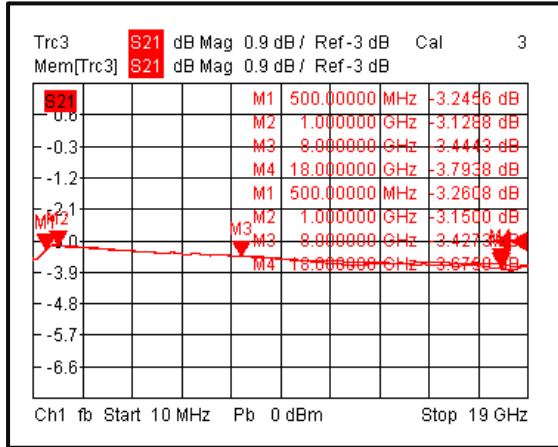
**Environmental Specifications and Test Standards**

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)

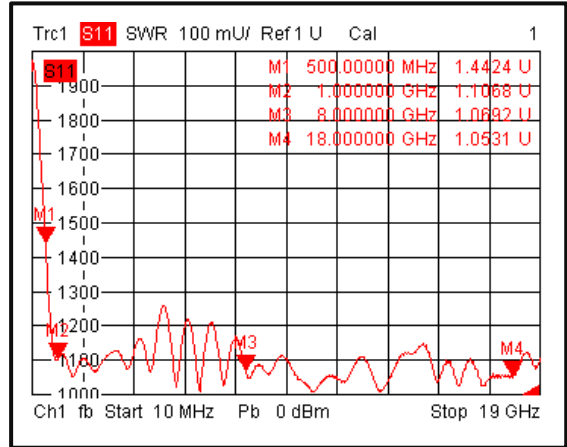
\*For vibration testing details please see additional information section.

Typical Performance Plots

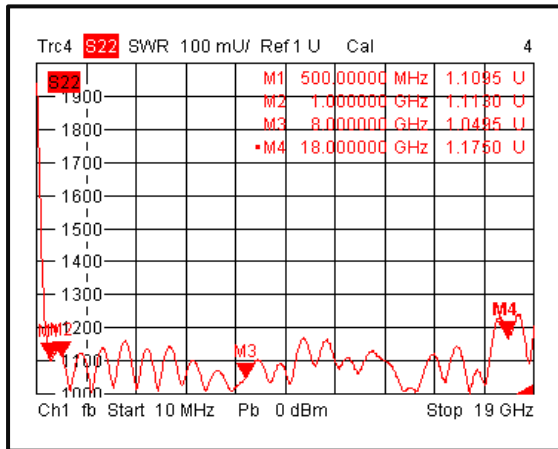
Loss & Amplitude Imbalance



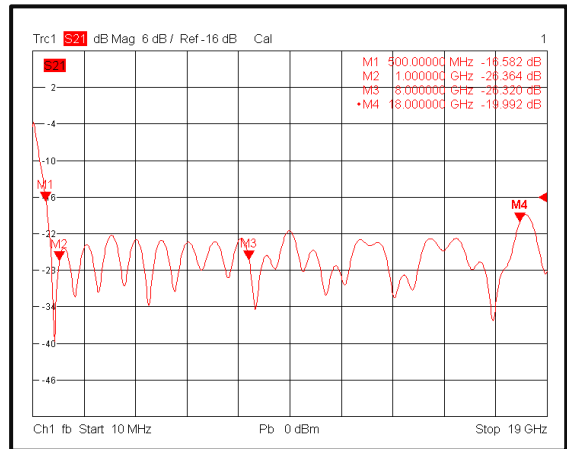
Input VSWR



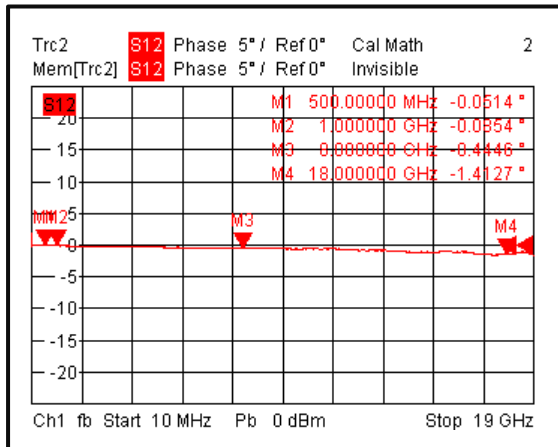
Output VSWR



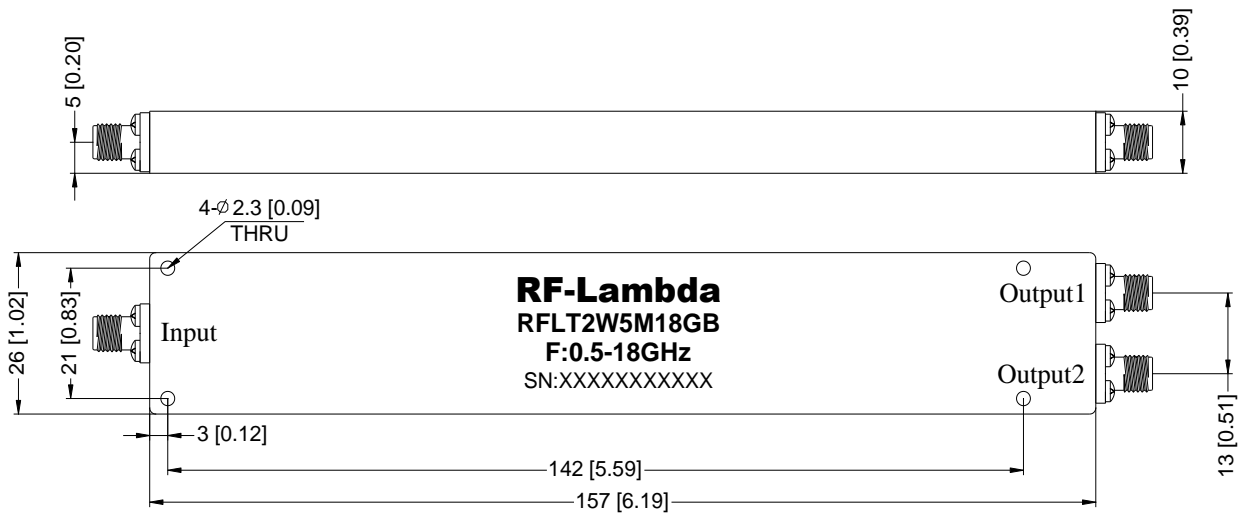
Isolation



Phase Imbalance

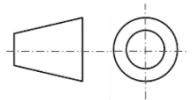


**Outline Drawing**



Notes:

1. Package Material: Aluminum
2. Finish: Blue Paint
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.
5. Standard torque wrench must be used to secure RF connectors.



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
RFLT2W5M18GB	Standard	0.5GHz-18GHz 2-Way Power Divider

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