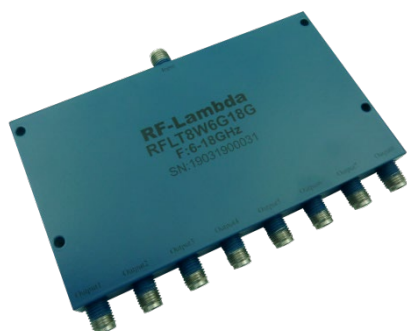


## Coaxial 30W 0° 8-Way Power Divider 6GHz-18GHz



### Product Description

RFLT8W6G18G is 8-Way power divider with a frequency range of 6 to 18GHz.

The Forward Power of this power divider is 30W. The Insertion Loss is 1.5dB 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 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

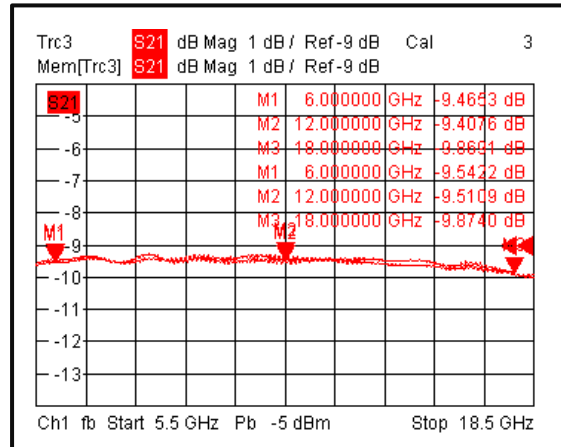
Parameter		Min	Typ	Max	Units
Frequency Range		6		18	GHz
Nominal Splitter Loss			9		dB
Insertion Loss			1.0	1.5	dB
Isolation		18	20		dB
Input VSWR			1.5	1.7	: 1
Output VSWR			1.35	1.5	: 1
Amplitude Imbalance			±0.4	±0.5	dB
Phase Imbalance			±6	±8	deg
Power Rating	Forward Power		30		W
	Reverse Power		1		W
	Peak Power (10% Duty Cycle, 1 us Pulse Width)		300		W
Weight			0.38 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

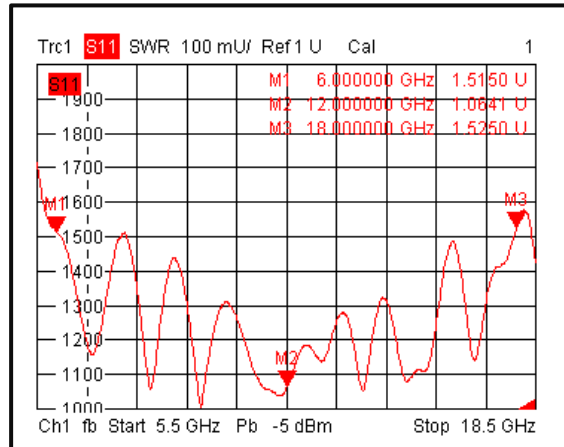
Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for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

Typical Performance Plots

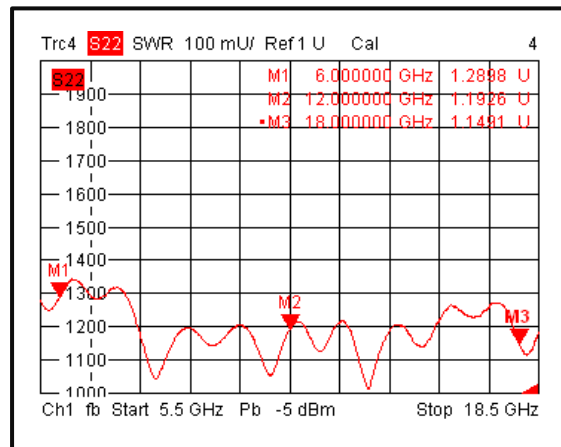
Loss & Amplitude Imbalance



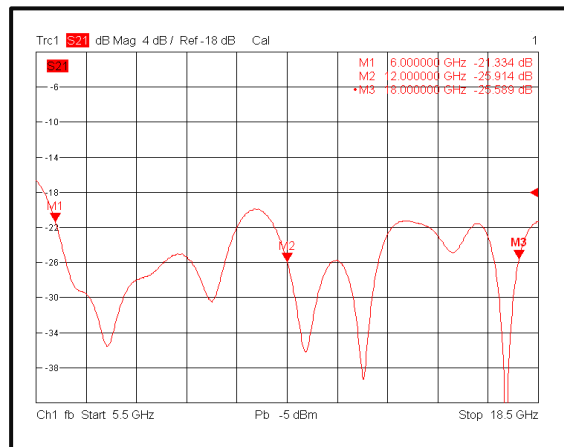
Input VSWR



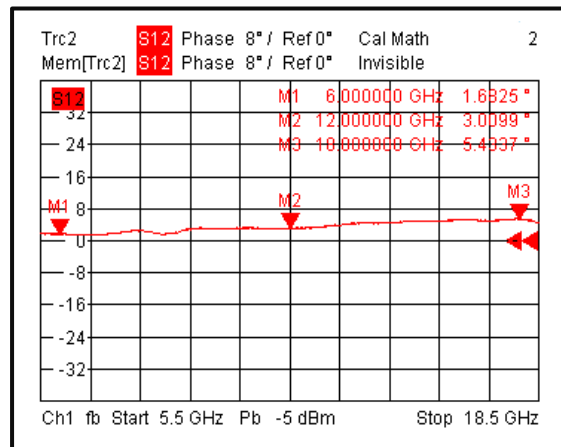
Output VSWR



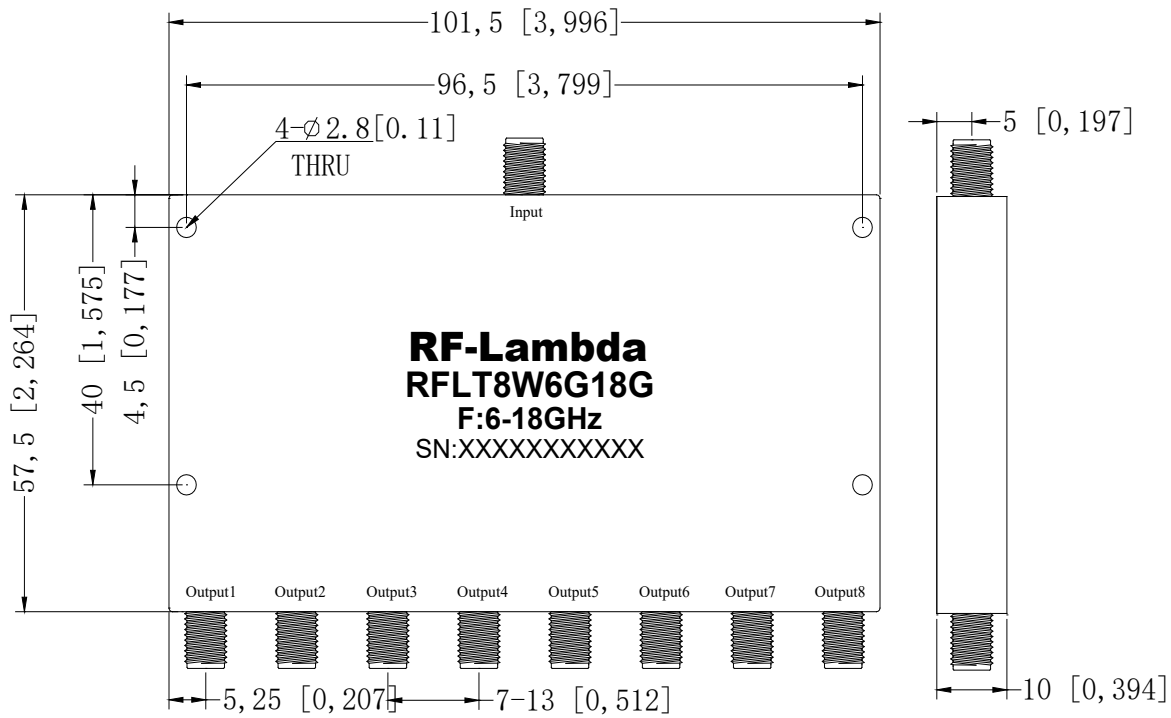
Isolation



Phase Imbalance

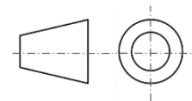


**Outline Drawing**



**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**

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
RFLT8W6G18G	Standard	6-18GHz 8-Way Power Divider

**Important Notice**

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