

Coaxial 20W 0° 8-Way Power Divider 6GHz-40GHz



Product Description

RFLT8W6G40G is 8-Way power divider with a frequency range of 6 to 40GHz.

The forward power rating of this power divider is 20W. The insertion loss is 2.2dB with a typical isolation of 18dB.

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		6		18	18		40	40		43.5	GHz	
Nominal Splitter Loss			9			9			9		dB	
Insertion Loss			1.5	2.0		2.2	2.5		3.2		dB	
Isolation		15	17		16	18			16		dB	
Input VSWR			1.6	2.2		1.8	2.0		2.0		: 1	
Output VSWR			1.5	1.6		1.4	1.6		1.6		: 1	
Amplitude Imbalance			±0.4	±0.5		±0.4	±0.5		±0.5		dB	
Phase Imbalance			±4	±5		±5	±6		±6		deg	
Power Rating	Forward Power						20					W
	Reverse Power						0.5					W
	Peak Power						200					W
(10% Duty Cycle, 1 us Pulse Width)												
Weight							0.32 Max.					lbs
Impedance							50					Ω
Input / Output Connectors		2.92mm-Female(Input) – 2.92mm-Female(Output)										
Package	Epoxy Sealed (Standard)											
	Hermetically Sealed (Optional)											

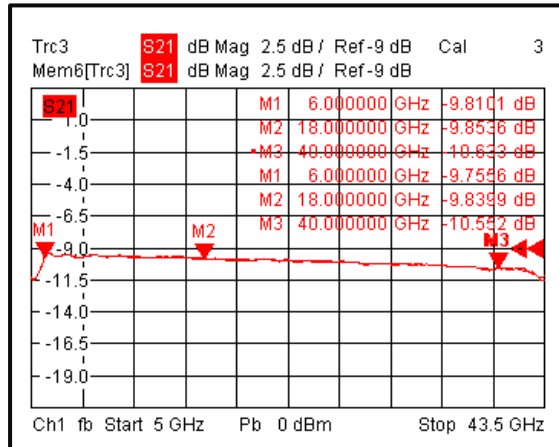
Environmental Specifications and Test Standards

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)

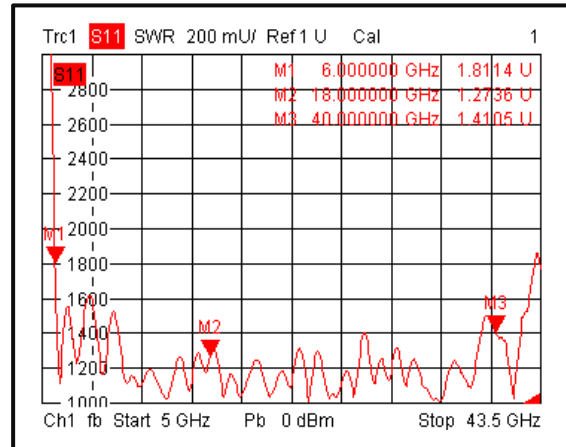
**For vibration testing details please see additional information section.

Typical Performance Plots

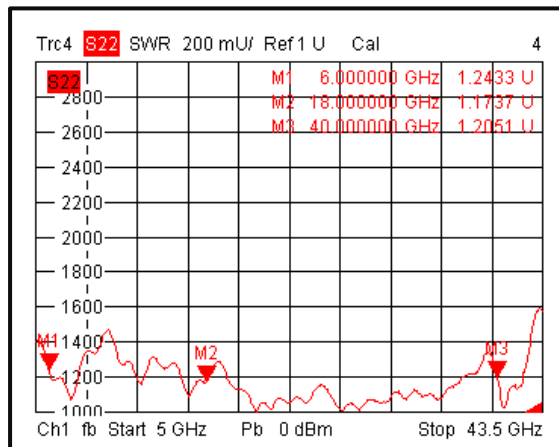
Loss & Amplitude Imbalance



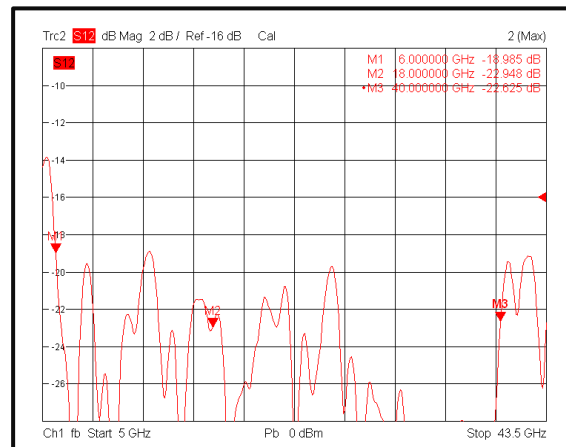
Input VSWR



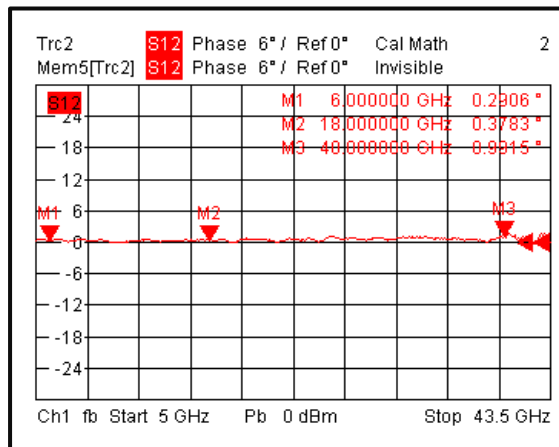
Output VSWR



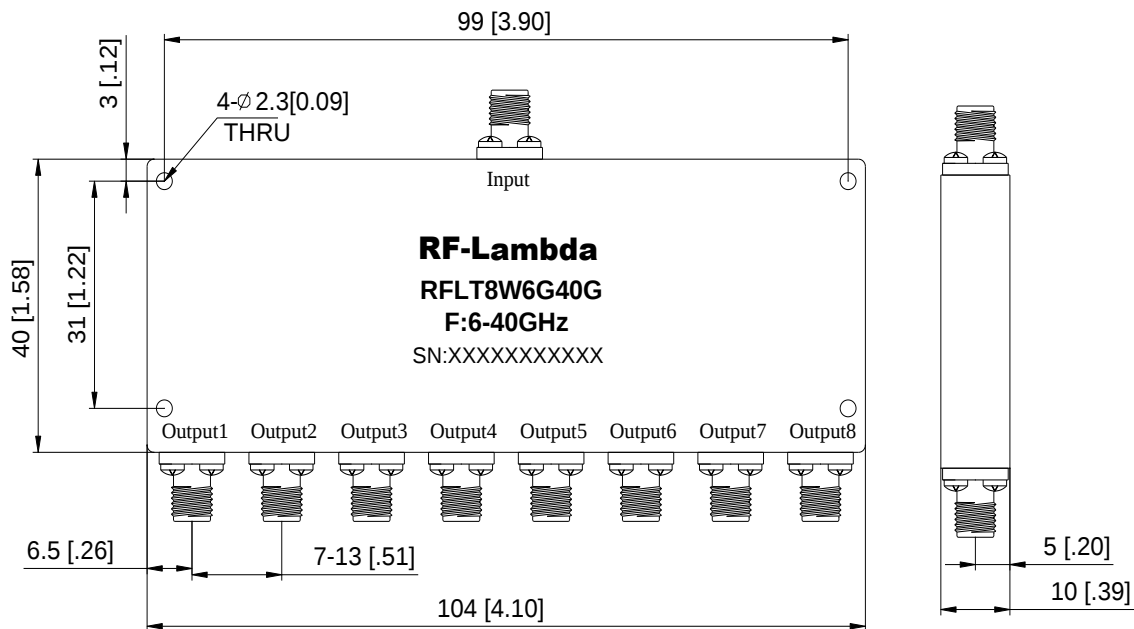
Isolation



Phase Imbalance

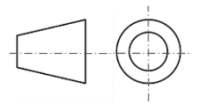


Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: Blue Paint
3. All dimensions are in millimeters [inches].
4. Outline Tolerances ± 0.5 [0.02], Mounting Hole Tolerances ± 0.2 [0.008] unless otherwise specified.
5. Standard torque wrench must be used to secure RF connectors.



Additional Information

Documentation

Connector Torque Specifications

https://www.rflambda.com/pdf/Torque_Specifications.pdf

Random Vibration Test Standard

https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Webpage

Ordering Information

Part Number	Modification	Description
RFLT8W6G40G	connectors 2.92mm-Female	6GHz-40GHz 8-Way Power Divider

Important Notice

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