

Coaxial 50W 0° 2-Way Power Divider 0.5GHz-6GHz 5W Reverse Power Handling



Product Description

RFLT2W0006G-HP is 2-way power divider with a frequency range of 0.5 to 6GHz.

The forward power of this power divider is 50W. The Insertion Loss is 0.8dB with a typical isolation of 20dB.

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

Features

- Forward power handling up to 50W
- Reverse power handling up to 5W
- 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

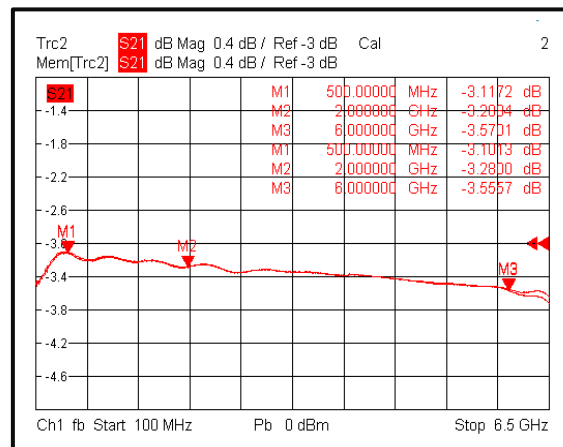
Parameter		Min	Typ	Max	Min	Typ	Max	Units
Frequency Range		0.5		2	2		6	GHz
Nominal Splitter Loss			3			3		dB
Insertion Loss			0.3	0.5		0.6	0.8	dB
Isolation		18	20		18	20		dB
Input VSWR			1.3	1.4		1.3	1.4	: 1
Output VSWR			1.2	1.3		1.25	1.3	: 1
Amplitude Imbalance				0.2			0.2	dB
Phase Imbalance				3			3	deg
Power Rating	Forward Power			50				W
	Reverse Power			5				W
	Peak Power			300 (10% Duty Cycle, 1 us Pulse Width)				W
Weight				0.2 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

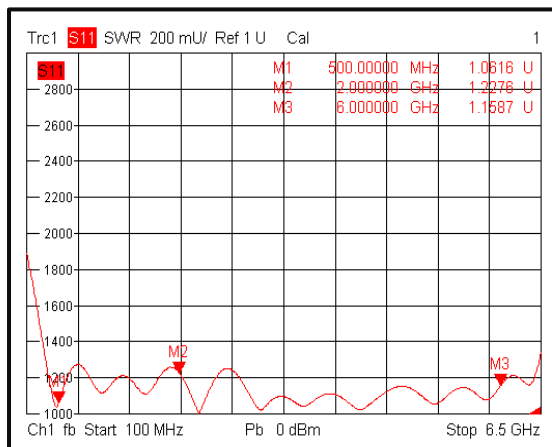
Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High Temperature Burn In	Temperature +85°C for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

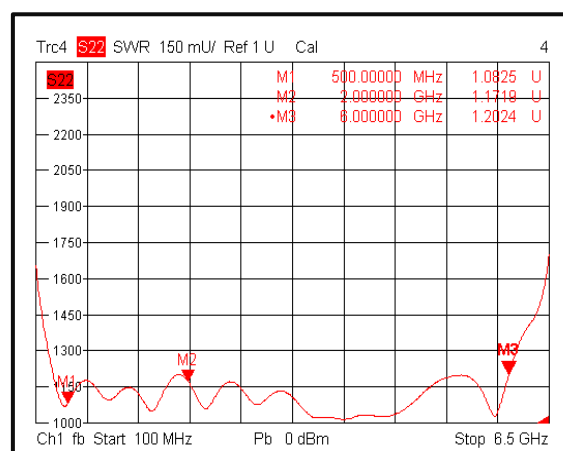
Loss & Amplitude Imbalance



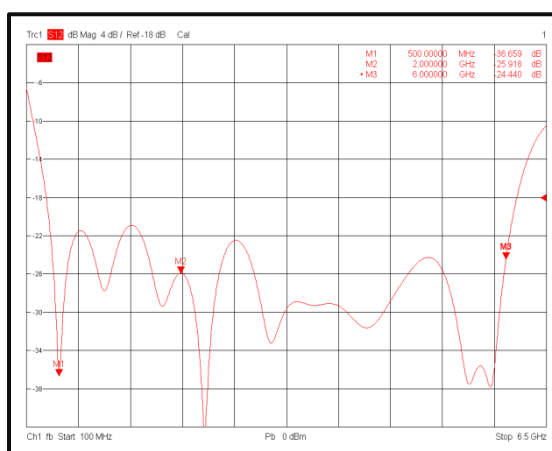
Input VSWR



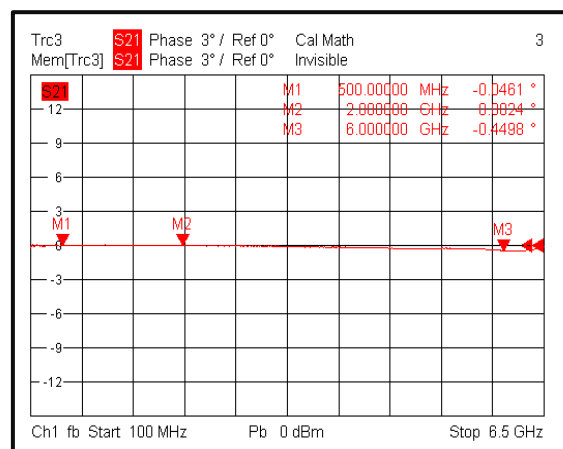
Output VSWR



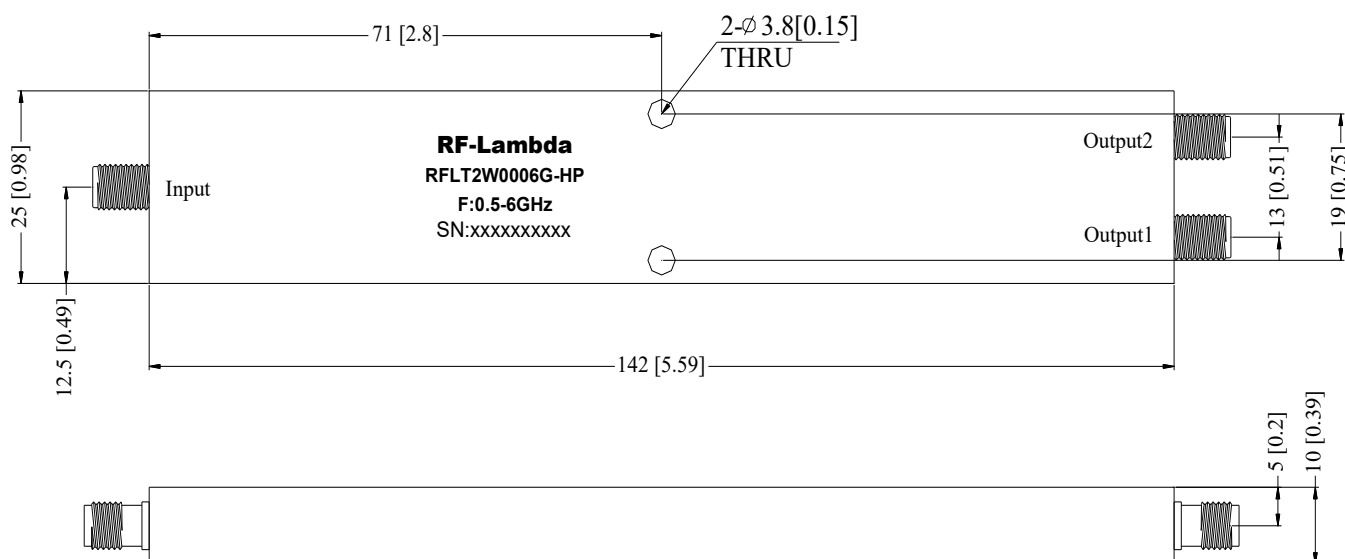
Isolation



Phase Imbalance

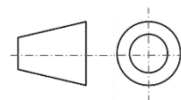


Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: 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

Webpage

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

Ordering Information

Part Number	Modification	Description
RFLT2W0006G	connectors SMA-Female	0.5GHz-6GHz 2-Way Power Divider
RFLT3W0006G	connectors SMA-Female	0.5GHz-6GHz 3-Way Power Divider
RFLT4W0006G	connectors SMA-Female	0.5GHz-6GHz 4-Way Power Divider
RFLT4W0006GA	connectors SMA-Female	0.5GHz-6GHz 4-Way Power Divider
RFLT8W0006G	connectors SMA-Female	0.5GHz-6GHz 8-Way Power Divider
RFLT2W0006G-HP	connectors SMA-Female / Reverse Power Handling 5W)	0.5GHz-6GHz 2-Way Power Divider

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