Coaxial 1W 0º 8-Way Power Divider DC-70GHz

Product Description

RFLT8WDC70G is an 8-way power divider with a frequency range of DC to 70GHz.

The forward power rating of this power divider is 1 W. The insertion loss is 25dB with a typical isolation of 12dB.

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

Features

- High power handling up to 1W
- 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		DC		26.5	26.5		70	GHz
Insertion Loss			23	24		25	26	dB
Isolation			11			12		dB
Input VSWR			1.6	1.8		1.6	1.8	: 1
Output VSWR			2.2			2.2		: 1
Amplitude Imbalance			±0.6	±0.8		±0.8	±1.0	dB
Phase Imbalance			±8	±10		±10	±12	deg
Power Rating	Forward Power			1				W
	Peak Power			10 (10% Duty Cycle, 1 us Pulse Width)				W
Weight				0.27 Max.				lbs
Impedance				50				Ω
Input / Output Connectors				1.85mm-female(Input) – 1.85mm-female(Output)				
Package				Epoxy Sealed (Standard)				
				Hermetically Sealed (Optional)				

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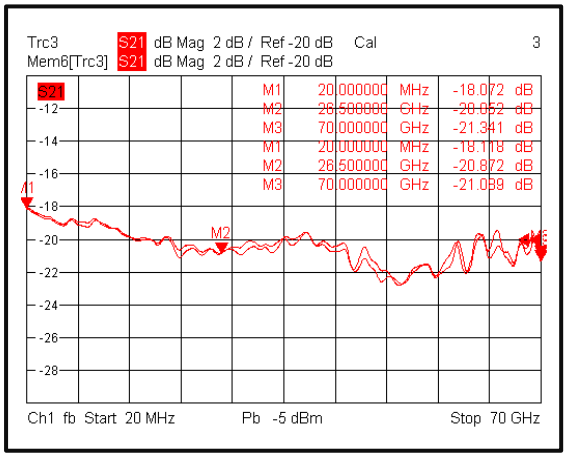
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40ºC to +85ºC (Case Temperature)
Storage Temperature	-50ºC to +105ºC
Thermal Shock	-40ºC → +85ºC (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)

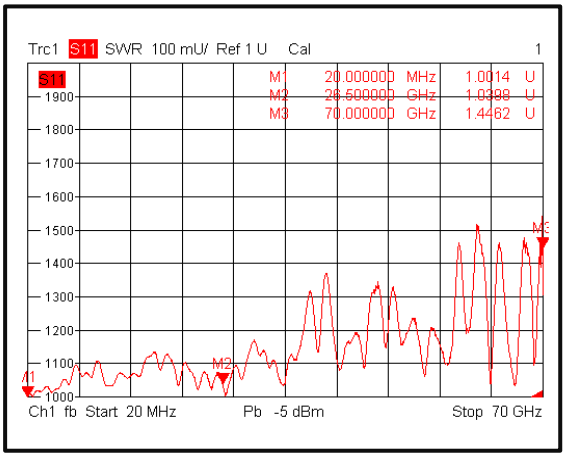
*For vibration testing details please see additional information section.

Typical Performance Plots

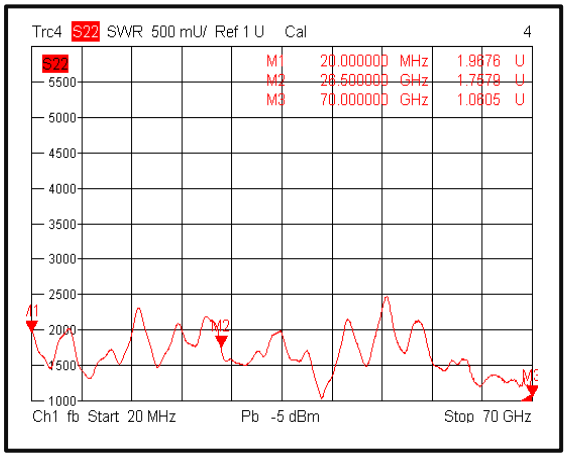
Loss & Amplitude Imbalance



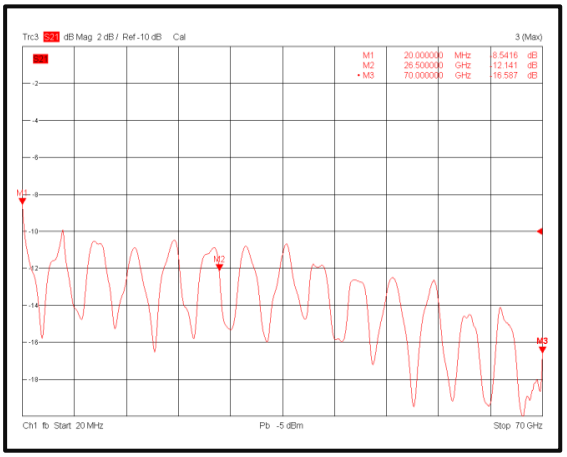
Input VSWR



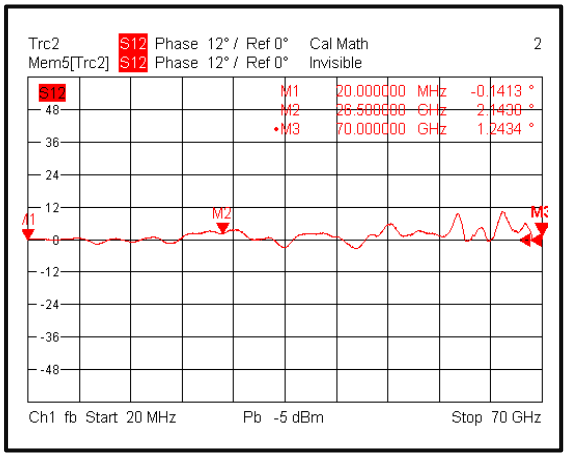
Output VSWR



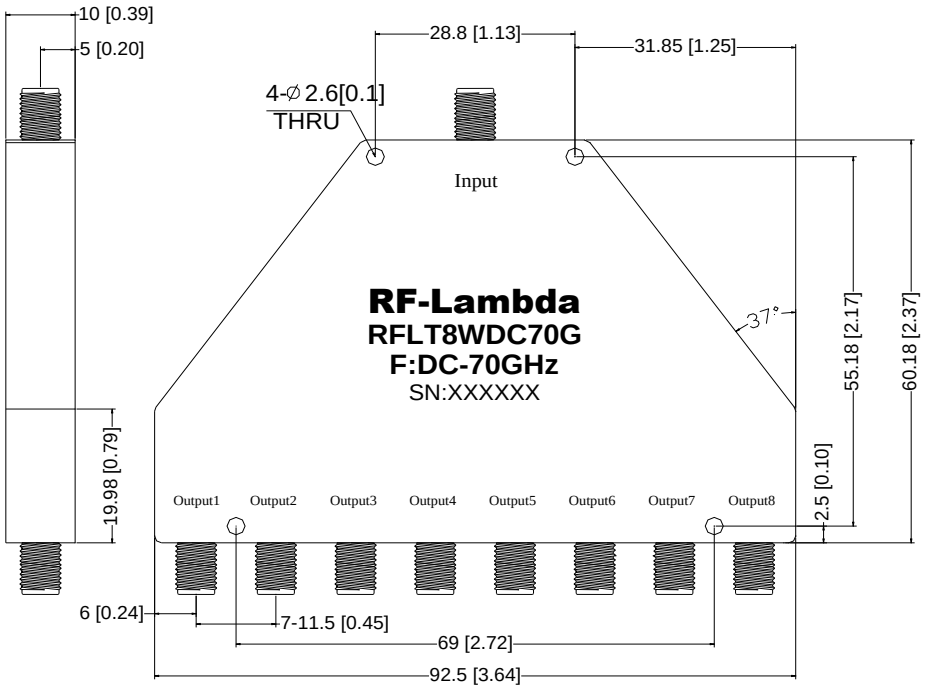
Isolation



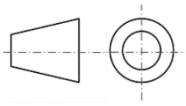
Phase Imbalance



Outline Drawing



Notes:
1. Package Material: Aluminum
2. Finish: Nickel Plated
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
RFLT8WDC70G	Connectors 1.85mm-Female	DC-70GHz 8-Way Power Divider

Important Notice

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