

Coaxial 1W 0° 8-Way Power Divider DC-40GHz



Features

- High power handling up to 1W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

Product Description

RFLT8WDC40G-R is 8-way power divider with a frequency range of DC to 40GHz.

The forward power rating of this power divider is 1 W. The insertion loss is 21dB with a typical isolation of 12dB.

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

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		40	GHz
Insertion Loss		21	23		21.5	23	dB
Isolation	9	11		10	12		dB
Input VSWR		1.25	1.5		1.3	1.6	: 1
Output VSWR		2.0	2.2		2.0	2.5	: 1
Amplitude Imbalance		±1.0	±1.5		±1.5	±2.0	dB
Phase Imbalance		±15	±20		±20	±25	deg
Power Rating	Forward Power	1					W
	Peak Power	10 (10% Duty Cycle, 1 us Pulse Width)					W
Weight	0.1 Max.						lbs
Impedance	50						Ω
Input / Output Connectors	2.92mm-female(Input) – 2.92mm-female(Output)						
Package	Epoxy Sealed (Standard)						
	Hermetically Sealed (Optional)						

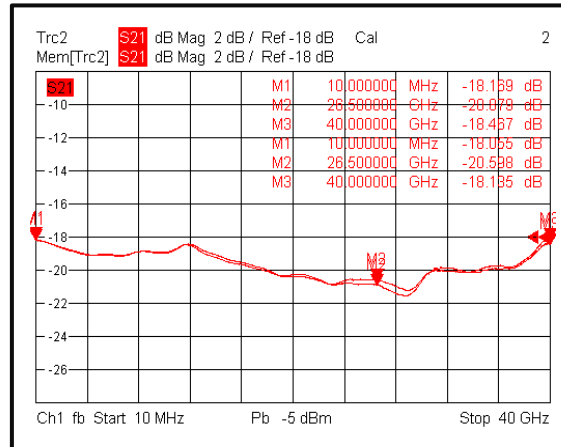
Environmental Specifications and Test Standards

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)

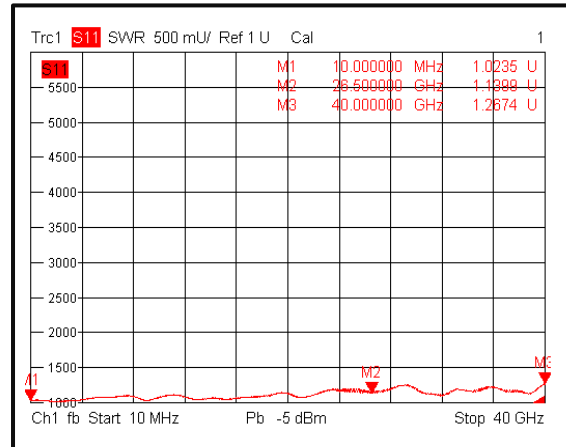
*For vibration testing details please see additional information section.

Typical Performance Plots

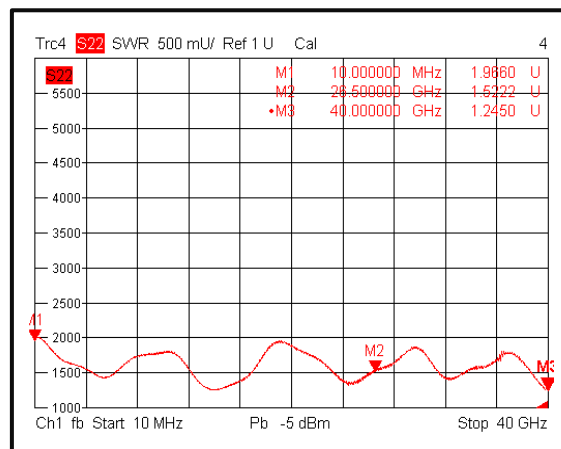
Loss & Amplitude Imbalance



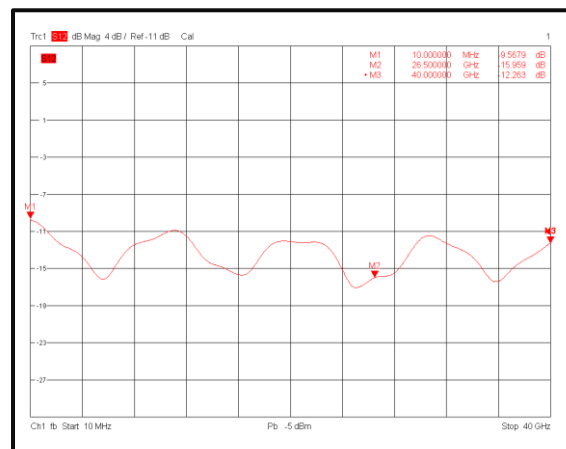
Input VSWR



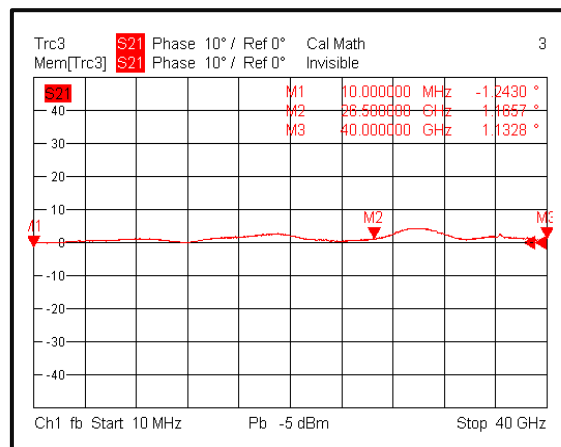
Output VSWR



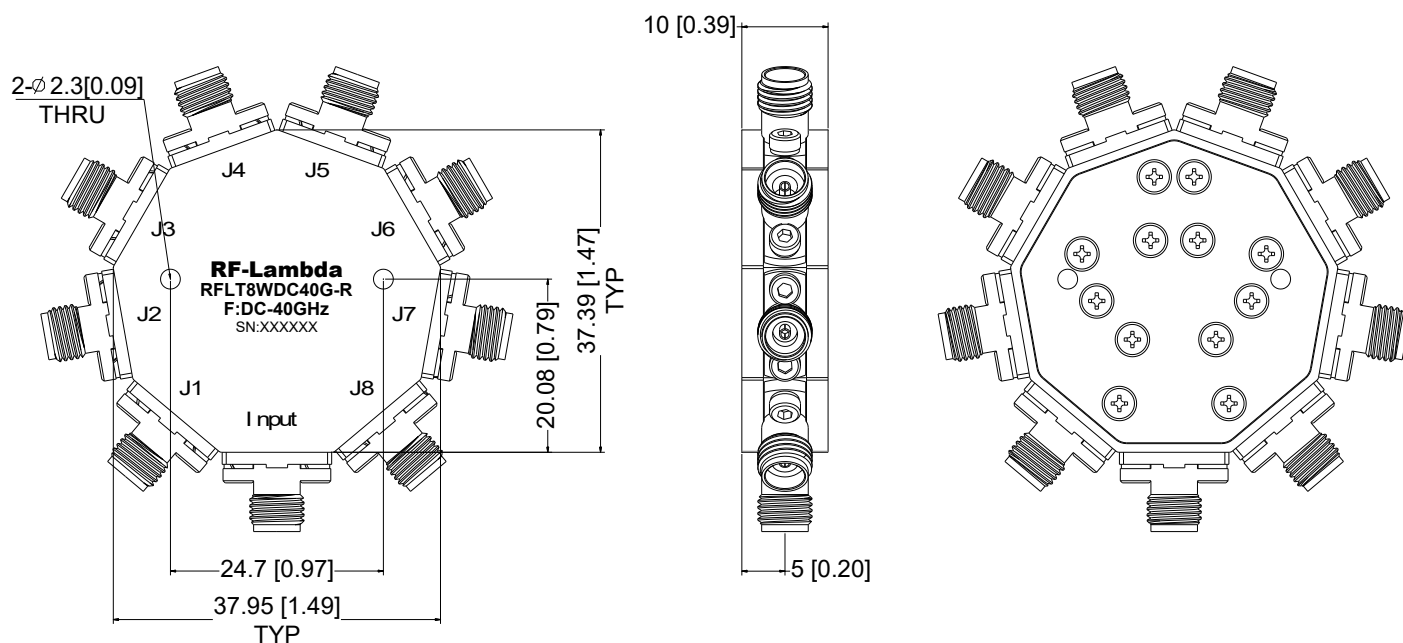
Isolation



Phase Imbalance

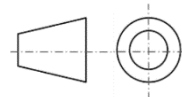


Outline Drawing



Notes:

1. Package Material: Aluminum
2. Finish: 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

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
RFLT8WDC40G-R	Connectors 2.92mm-Female	DC-40GHz 8-Way Power Divider

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