

Coaxial 50W 0° 2-Way Power Divider 0.8GHz-2.5GHz



Product Description

RFLT2W08024-5 is a 2-Way power divider with a frequency range of 0.8 to 2.5GHz.

The forward power of this power divider is 50W. The insertion loss is 0.2dB with a typical isolation of 22dB.

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

Features

- High power handling up to 50W
- 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	0.8		2.5	GHz
Nominal Splitter Loss		3		dB
Insertion Loss		0.2	0.35	dB
Isolation	20	22		dB
Input VSWR		1.2	1.25	: 1
Output VSWR		1.15	1.2	: 1
Amplitude Imbalance		0.1	0.2	dB
Phase Imbalance		1.5	2	deg
Power Rating	Forward Power	30@SMA-Type 50@N-Type		W
	Reverse Power	3@SMA-Type 5@N-Type		W
	Peak Power	300@SMA-Type 500@N-Type (10% Duty Cycle, 1 us Pulse Width)		W
Weight		0.045 Max.		lbs
Impedance		50		Ω
Input / Output Connectors		SMA-Female(RFLT2W08025) N-Female(RFLT2W08024)		
Package		Epoxy Sealed (Standard)		
		Hermetically Sealed (Optional)		

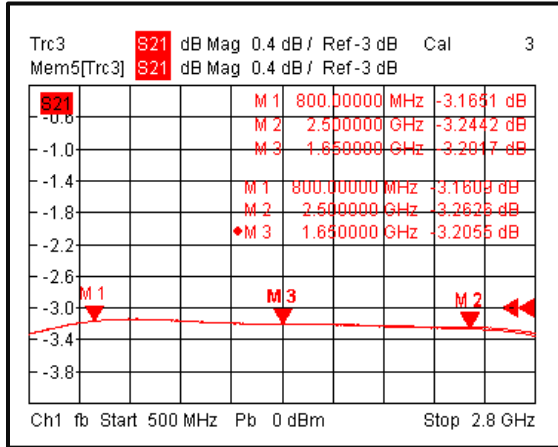
Environmental Specifications and Test Standards

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)

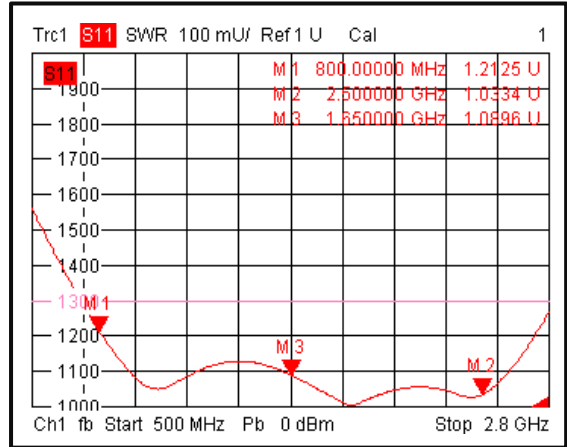
*For vibration testing details please see additional information section.

Typical Performance Plots

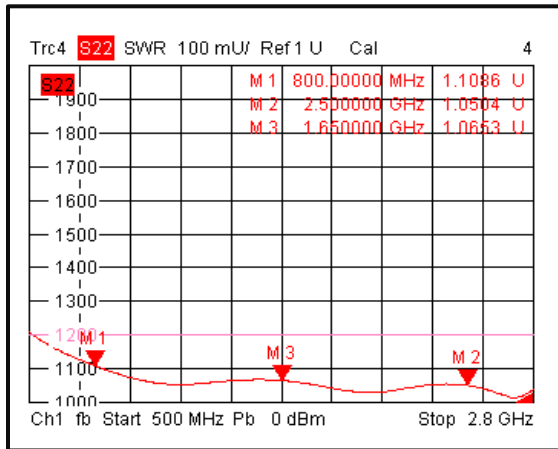
Loss & Amplitude Imbalance



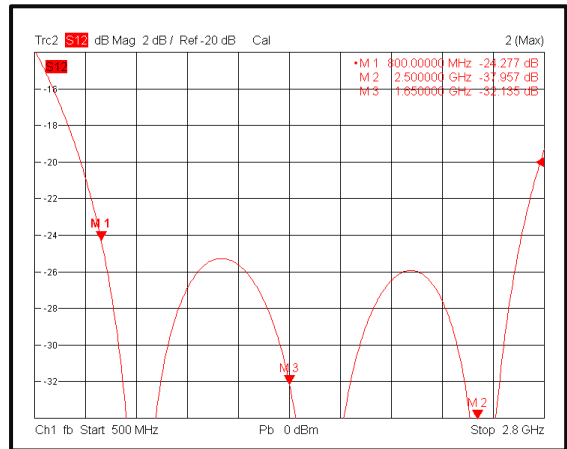
Input VSWR



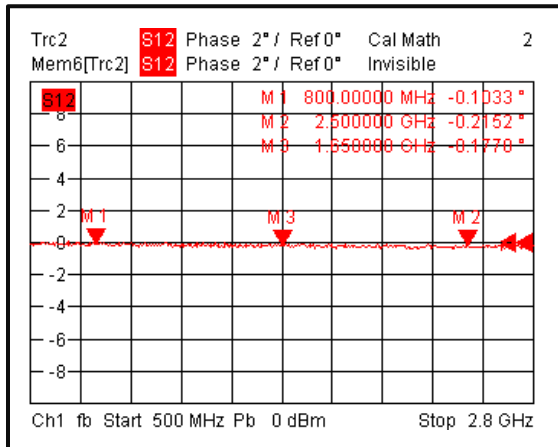
Output VSWR



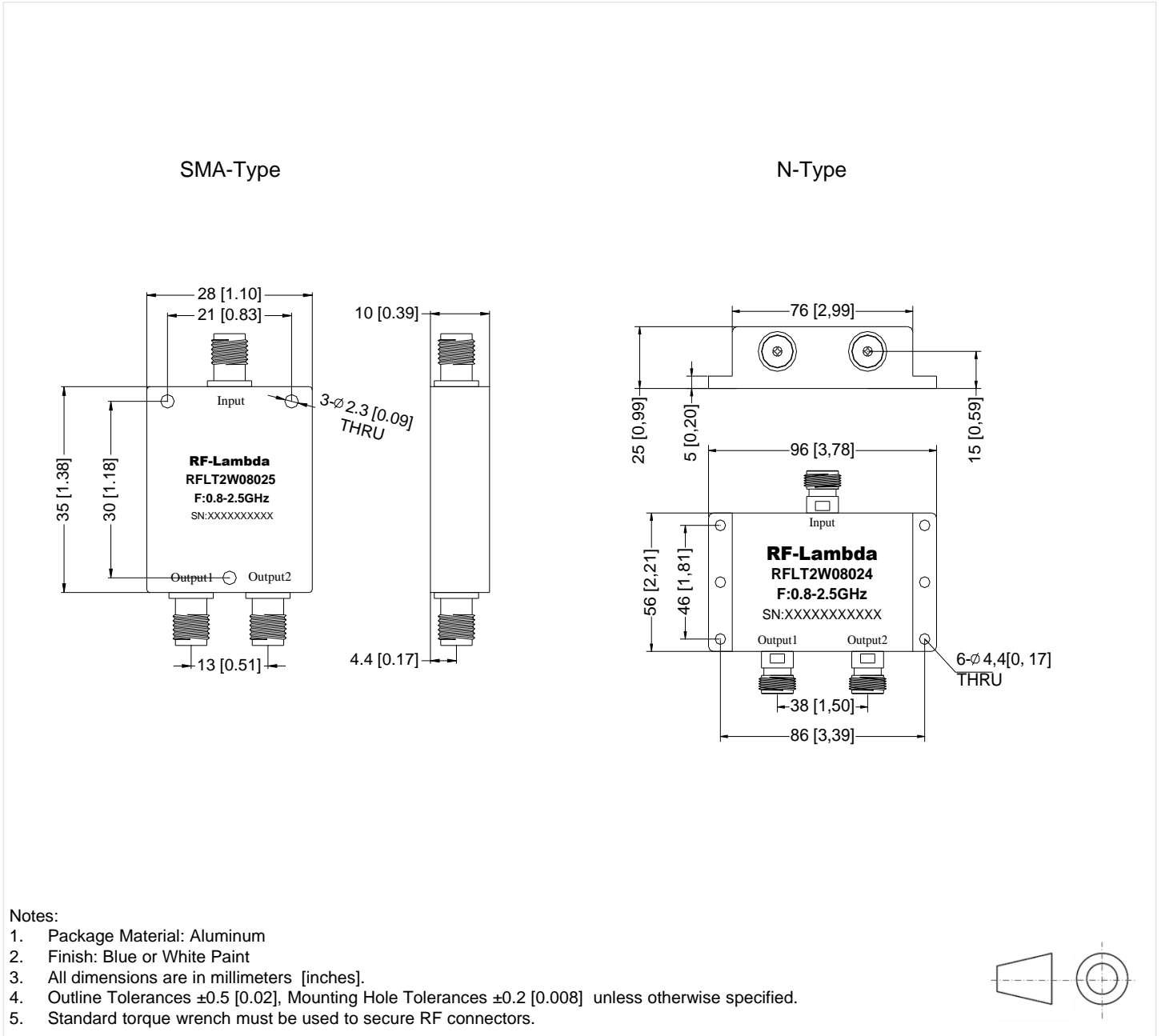
Isolation



Phase Imbalance



Outline Drawing



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
RFLT2W08025	Connectors SMA-Female	0.8GHz-2.5GHz 2-Way Power Divider
RFLT2W08024	Connectors N-Female	0.8GHz-2.5GHz 2-Way Power Divider

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