Coaxial 30W 0º 4-Way Power Divider 6GHz-18GHz

Product Description

RFLT4W6G18G-N is a 4-way power divider with a frequency range of 6 to 18GHz.

The maximum forward power of this power divider is 30W. The insertion loss is 0.7dB with a typical isolation of 20dB.

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

Features

- High power handling up to 30W
- 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		6		12	12		18	GHz
Nominal Splitter Loss			6			6		dB
Insertion Loss			0.7	0.9		0.8	1.0	dB
Isolation		18	20		18	19		dB
Input VSWR			1.5	1.6		1.5	1.6	: 1
Output VSWR			1.4	1.5		1.4	1.5	: 1
Amplitude Imbalance			±0.2	±0.3		±0.2	±0.3	dB
Phase Imbalance			±4	±5		±5	±6	deg
Power Rating	Forward Power			30				W
	Reverse Power			1				W
	Peak Power			300 (10% Duty Cycle, 1 us Pulse Width)				W
Weight				0.15 Max.				lbs
Impedance				50				Ω
Input / Output Connectors				SMA-Female(Input) – SMA-Female(Output)				
Package				Epoxy Sealed (Standard)				
				Hermetically Sealed (Optional)				

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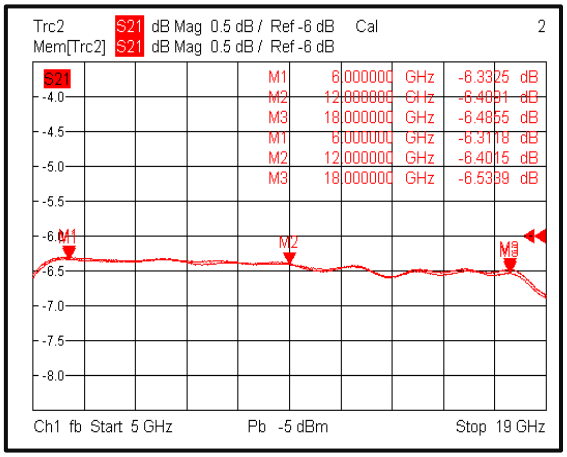
Environmental Specifications and Test Standards

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)

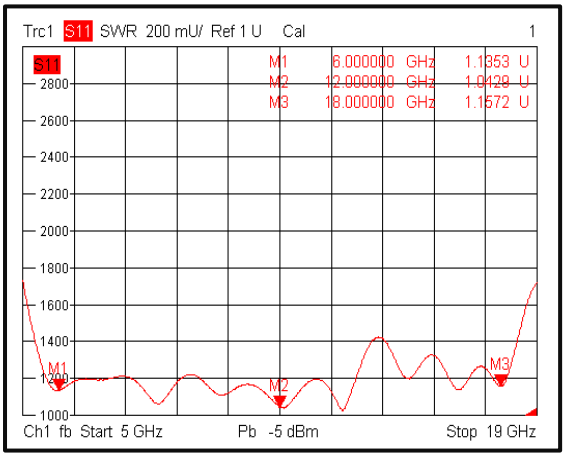
*For vibration testing details please see additional information section.

Typical Performance Plots

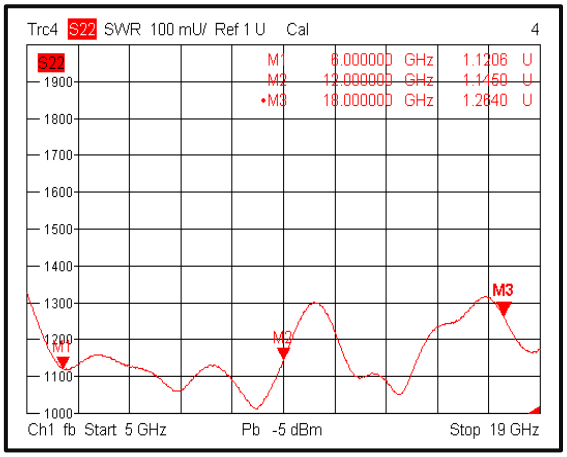
Loss & Amplitude Imbalance



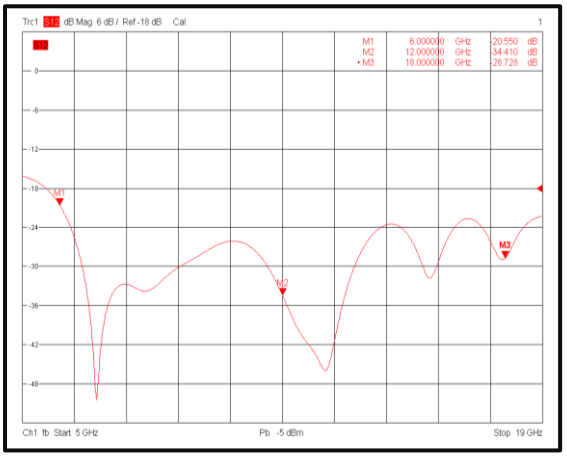
Input VSWR



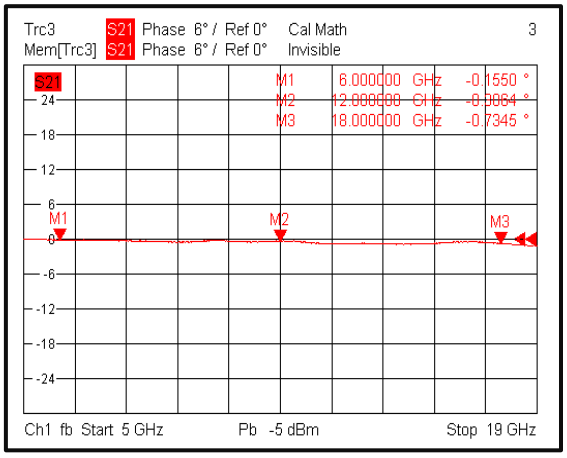
Output VSWR



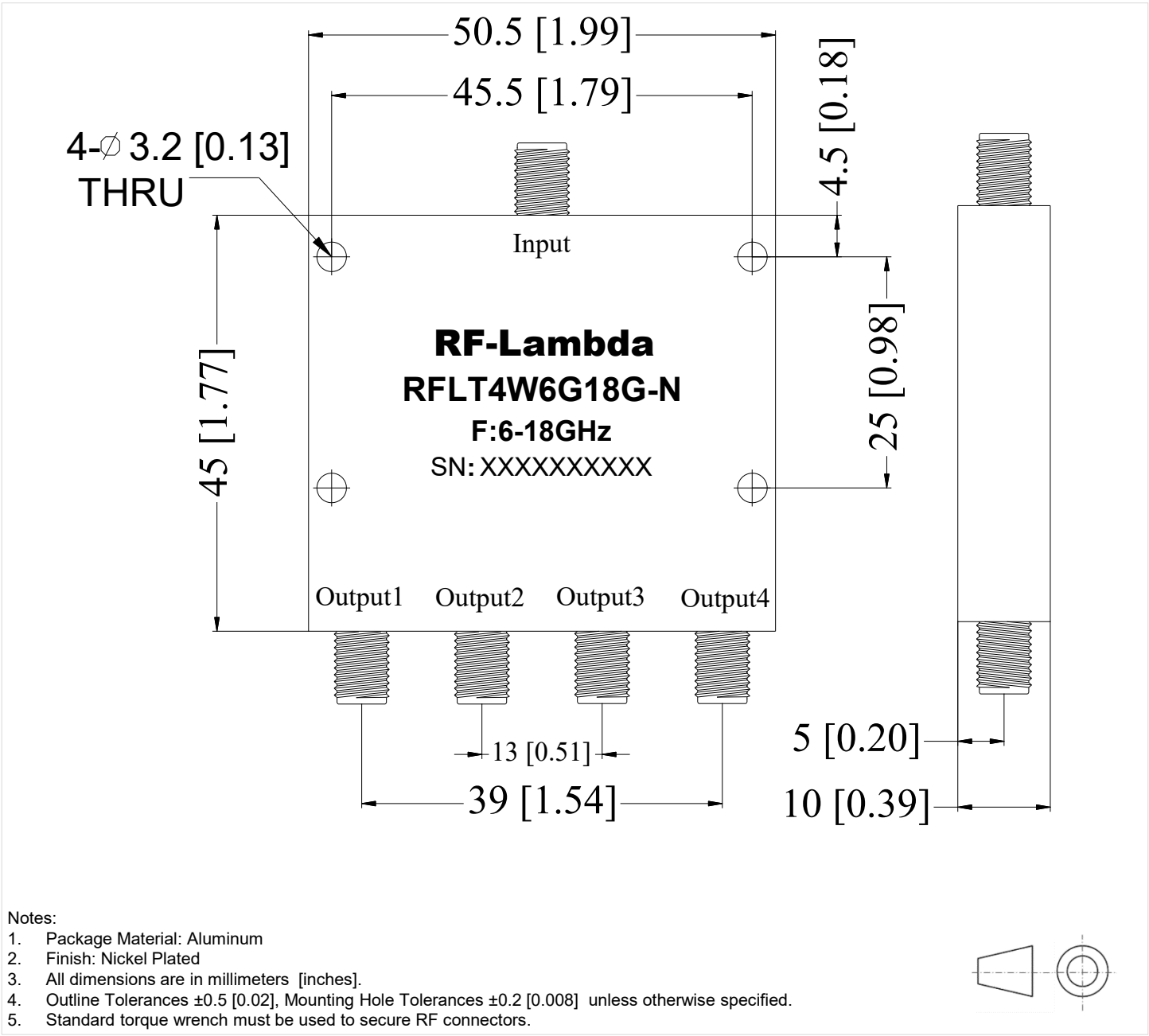
Isolation



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
RFLT4W6G18G-N	Connectors SMA-Female	6-18GHz 4-Way Power Divider

Important Notice

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