

## Coaxial 30W 0° 16-Way Power Divider 0.8GHz-2.5GHz



### Product Description

RFLT16W08030 is 16-Way power divider with a frequency range of 0.8 to 2.5GHz.

The maximum forward power of this power divider is 30W. The insertion loss is 1.0dB with a typical isolation of 23dB.

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

### 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  | Units |
|---------------------------|--------------------------------|-------------------------------------------|----------|------|-------|
| Frequency Range           |                                | 0.8                                       |          | 2.5  | GHz   |
| Nominal Splitter Loss     |                                |                                           | 12       |      | dB    |
| Insertion Loss            |                                |                                           | 1.0      | 1.5  | dB    |
| Isolation                 |                                | 18                                        | 23       |      | dB    |
| Input VSWR                |                                |                                           | 1.4      | 1.5  | : 1   |
| Output VSWR               |                                |                                           | 1.2      | 1.3  | : 1   |
| Amplitude Imbalance       |                                |                                           | ±0.3     | ±0.4 | dB    |
| Phase Imbalance           |                                |                                           | ±5       | ±8   | deg   |
| Power Rating              | Forward Power                  |                                           | 30       |      | W     |
|                           | Reverse Power                  |                                           | 2        |      | W     |
|                           | Peak Power                     | 300<br>(10% Duty Cycle, 1 us Pulse Width) |          |      | W     |
| Weight                    |                                |                                           | 1.2 Max. |      | lbs   |
| Impedance                 |                                |                                           | 50       |      | Ω     |
| Input / Output Connectors |                                | SMA-Female(Input) – SMA-Female(Output)    |          |      |       |
| Package                   | Epoxy Sealed (Standard)        |                                           |          |      |       |
|                           | Hermetically Sealed (Optional) |                                           |          |      |       |

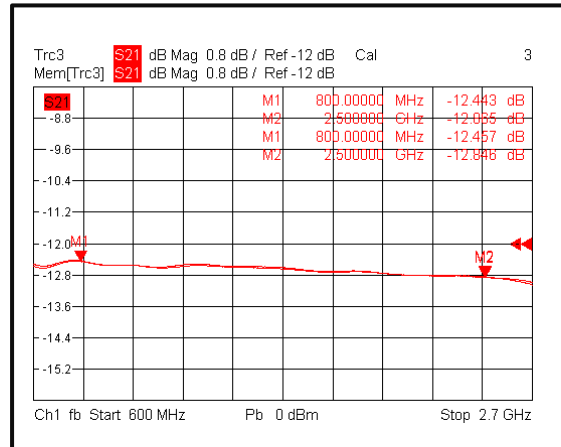
## Environmental Specifications and Test Standards

| Parameter                         | Description                                                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational Temperature           | -40°C to +85°C<br>(Case Temperature)                                                                                                                                                                            |
| Storage Temperature               | -50°C to +105°C                                                                                                                                                                                                 |
| Thermal Shock                     | -40°C → +85°C<br>(5 Cycles / 10 hours)                                                                                                                                                                          |
| **Random Vibration                | MIL-STD-202G<br>Table 214-I, Test Condition Letter C<br>1.5 Hours Per Axis                                                                                                                                      |
| Shock                             | 1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s<br>2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s<br>3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude                          | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment)<br>Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)                                                                                             |
| Hermetically Sealed<br>(Optional) | MIL-STD-883 (For Hermetically Sealed Units)                                                                                                                                                                     |

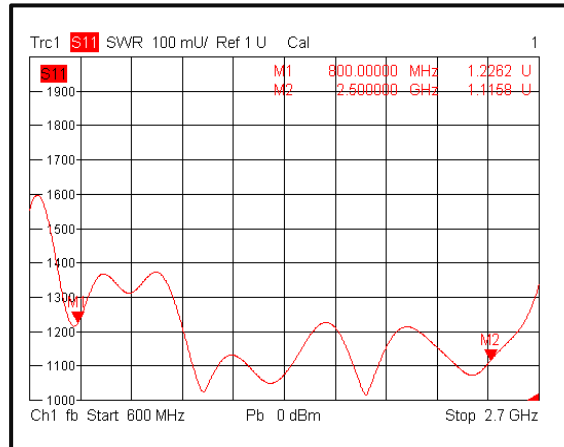
\*\*For vibration testing details please see additional information section.

Typical Performance Plots

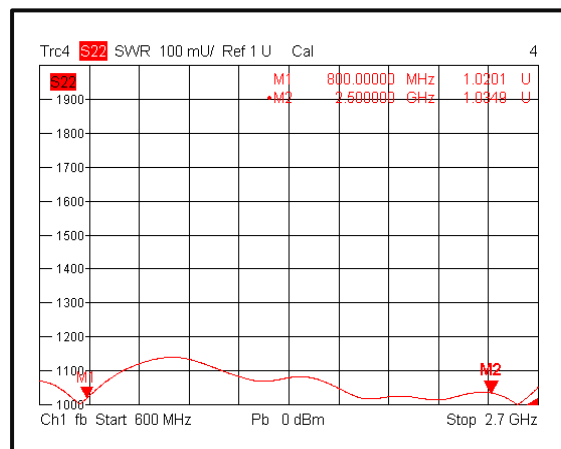
Loss & Amplitude Imbalance



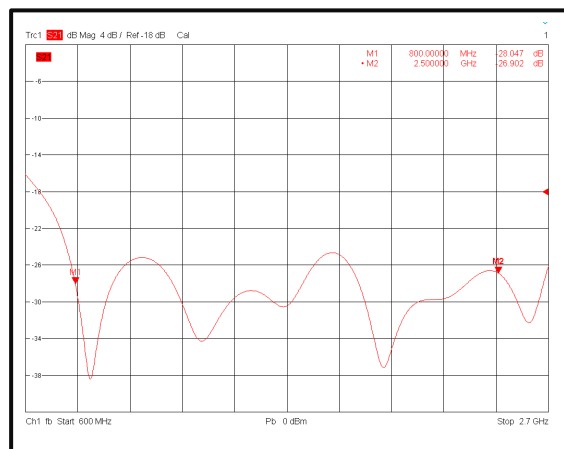
Input VSWR



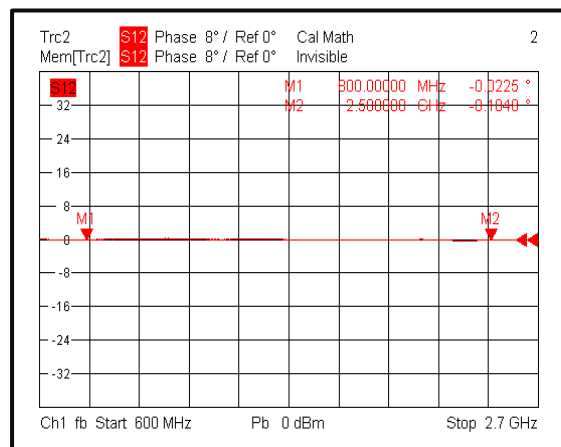
Output VSWR



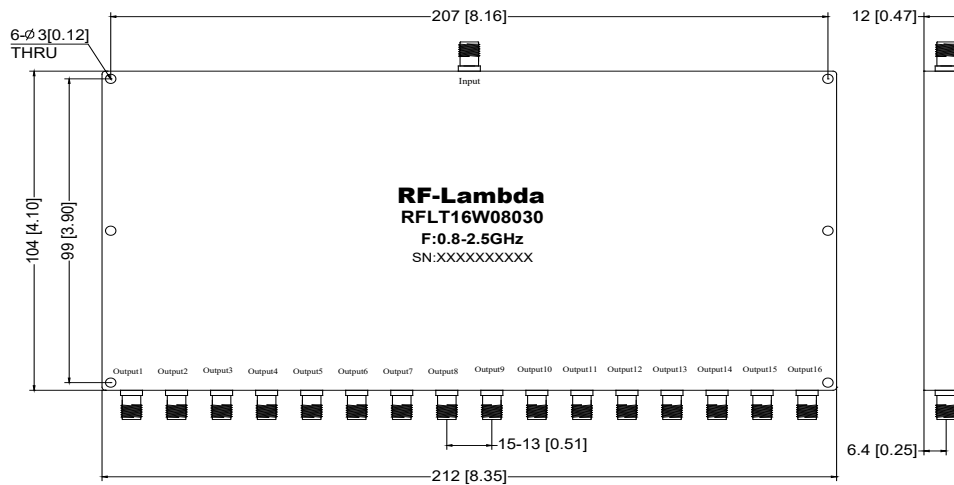
Isolation



Phase Imbalance

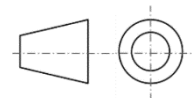


**Outline Drawing**



**Notes:**

1. Package Material: Aluminum
2. Finish: Blue Paint
3. All dimensions are in millimeters [inches].
4. Outline Tolerances  $\pm 0.5$  [0.02], Mounting Hole Tolerances  $\pm 0.2$  [0.008] unless otherwise specified.



**Additional Information**

**Documentation**

Connector Torque Specifications

[https://www.rflambda.com/pdf/Torque\\_Specifications.pdf](https://www.rflambda.com/pdf/Torque_Specifications.pdf)

Random Vibration Test Standard

[https://www.rflambda.com/pdf/rflambda\\_random\\_vibration\\_MIL-STD-202G.pdf](https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf)

**Webpage**

Ordering Information

| Part Number  | Modification | Description                     |
|--------------|--------------|---------------------------------|
| RFLT16W08030 | Standard     | 0.8-2.5GHz 16-Way Power Divider |

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