

## Coaxial 300W 0° 2-Way Power Divider 0.8GHz-3.5GHz



### Product Description

RFHT2W08035 is a 2-Way power divider with a frequency range of 0.8 to 3.5GHz.

The forward power handling of this power divider is 300W. The insertion loss is 0.25dB with a typical isolation of 6dB.

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

### Features

- High power handling up to 300W
- 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                                |                                         | 3.5  | GHz   |
| Nominal Splitter Loss     |                                |                                    | 3                                       |      | dB    |
| Insertion Loss            |                                |                                    |                                         | 0.25 | dB    |
| Input VSWR                |                                |                                    |                                         | 1.25 | : 1   |
| Amplitude Imbalance       |                                |                                    |                                         | 0.2  | dB    |
| Power Rating              | Forward Power                  |                                    | 300                                     |      | W     |
|                           | Reverse Power                  |                                    | 150                                     |      | W     |
|                           | Peak Power                     |                                    | 3<br>(10% Duty Cycle, 1 us Pulse Width) |      | KW    |
| Weight                    |                                |                                    | 0.7 Max.                                |      | lbs   |
| Impedance                 |                                |                                    | 50                                      |      | Ω     |
| Input / Output Connectors |                                | N-Female(Input) – N-Female(Output) |                                         |      |       |
| Package                   | Epoxy Sealed (Standard)        |                                    |                                         |      |       |
|                           | Hermetically Sealed (Optional) |                                    |                                         |      |       |

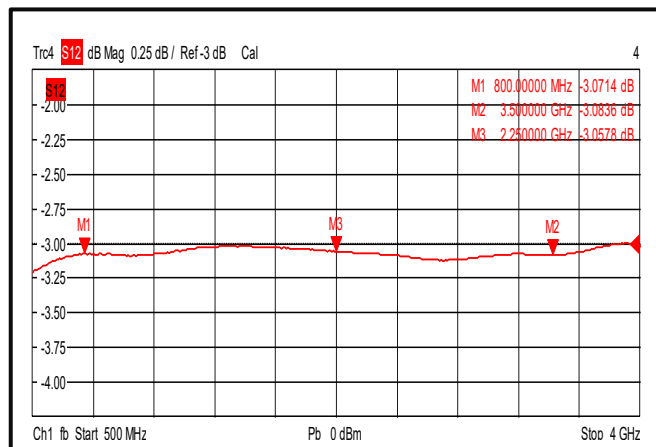
## Environmental Specifications and Test Standards

| 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)                                                                                                                                                                     |

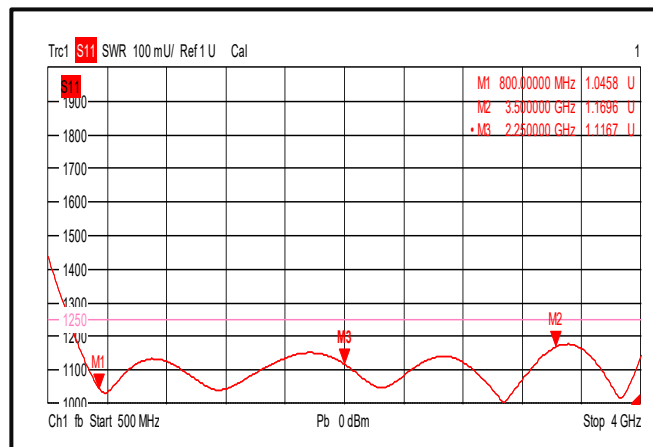
\*\*For vibration testing details please see additional information section.

Typical Performance Plots

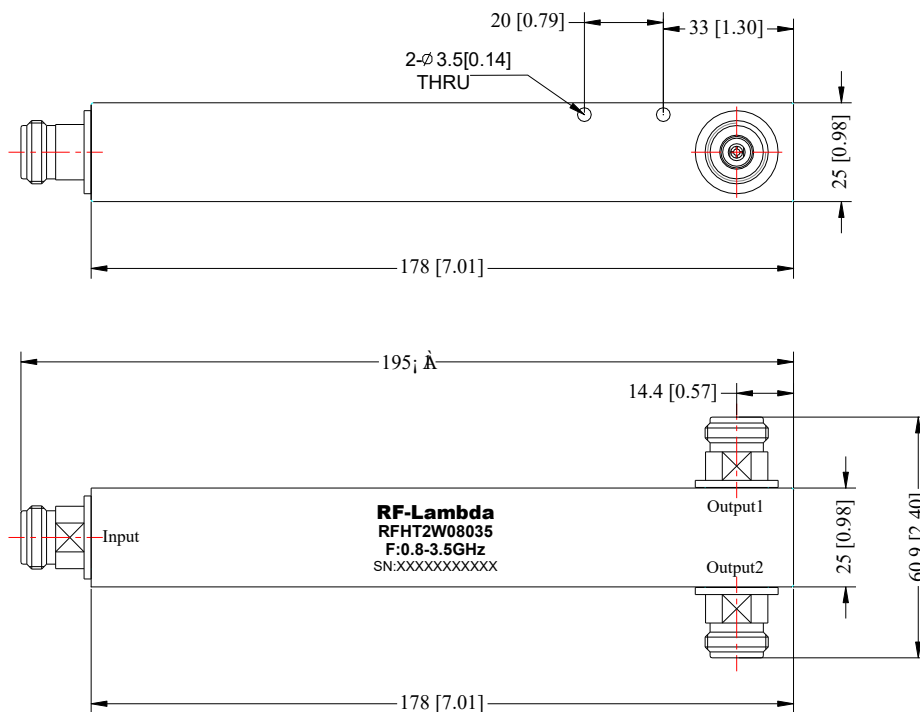
Loss & Amplitude Imbalance



Input VSWR

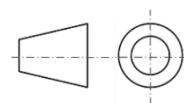


**Outline Drawing**



**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.
5. Standard torque wrench must be used to secure RF connectors.



**Additional Information**

**Documentation**

Connector Torque Specifications

Random Vibration Test Standard

**Webpage**

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

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

## Ordering Information

| Part Number | Modification        | Description                       |
|-------------|---------------------|-----------------------------------|
| RFHT2W08035 | Connectors N-Female | 0.8GHz-3.5GHz 2-Way Power Divider |

## Important Notice

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