

## WR340 Dual Crossguide Directional Coupler 2.2GHz – 2.7GHz



### Product Description

RWGDCP340SC is a dual crossguide directional coupler with a frequency range of 2.2 to 2.7GHz.

The power handling for this dual directional coupler is 500W. The maximum insertion loss is 0.3dB with a minimum directivity of 20dB.

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

### Features

- Full band operation
- Low VSWR
- Rugged mechanical configuration

### 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

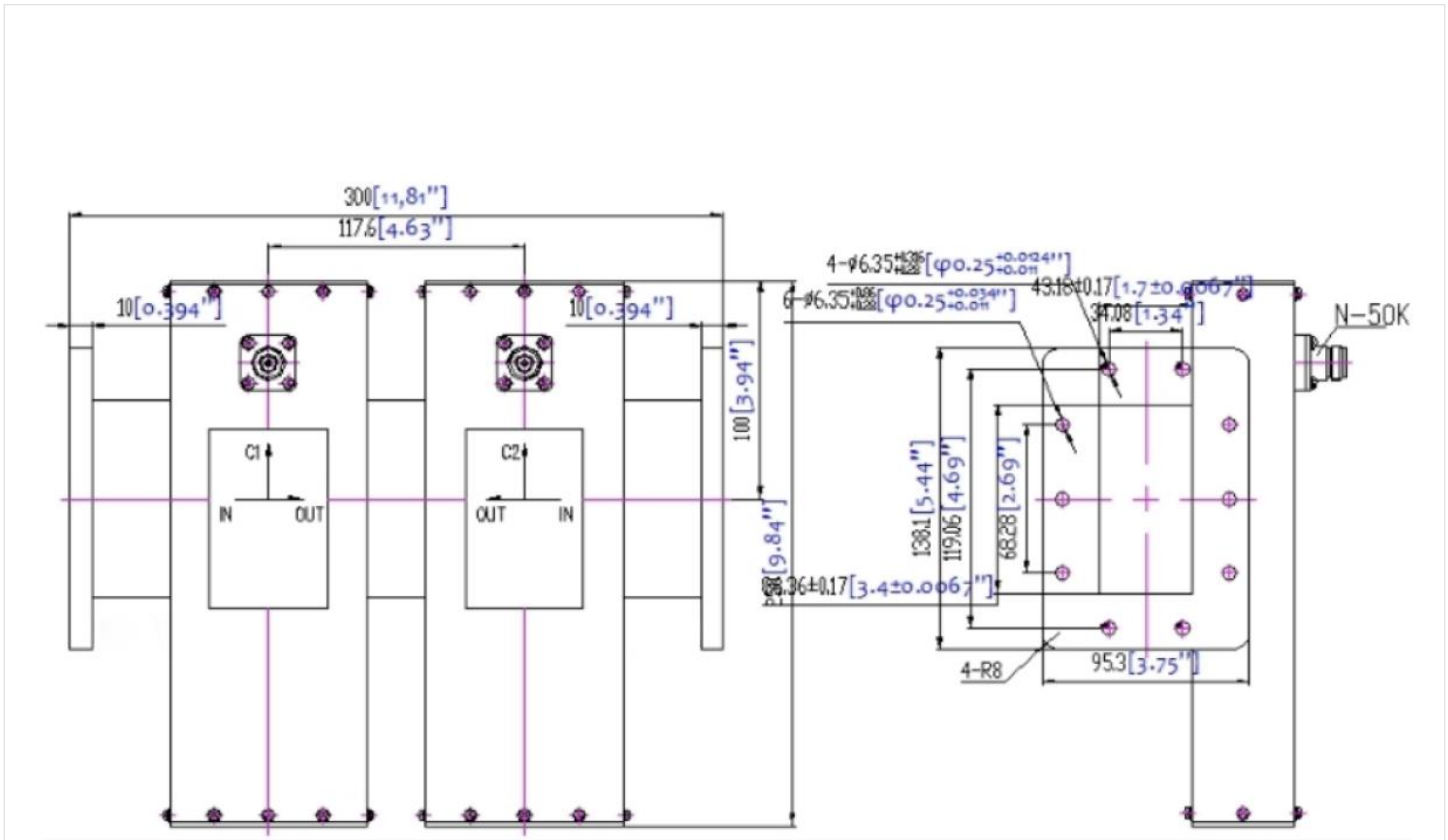
| Parameter                 | Min | Typ      | Max | Units |
|---------------------------|-----|----------|-----|-------|
| Frequency Range           | 2.2 |          | 2.7 | GHz   |
| Coupling Forward          |     | 40±1.5   |     | dB    |
| Directivity               |     | 20       |     | dB    |
| Insertion Loss            |     | 0.3      |     | dB    |
| VSWR (Main line)          |     |          | 1.1 | : 1   |
| Power handling            |     | 500      |     | W     |
| Waveguide Type            |     | WR340    |     |       |
| Flange Type               |     | CPRF     |     |       |
| Input / Output Connectors |     | N-Female |     |       |

**Environmental Specifications and Test Standards**

| Parameter                         | Description   |
|-----------------------------------|---|
| Operational Temperature           | -45°C to +85°C<br>(Case Temperature)  |
| Storage Temperature               | -55°C to +125°C   |
| Thermal Shock                     | -45°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)   |

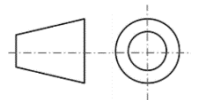
\*\*For vibration testing details please see additional information section.

**Outline Drawing**



**Notes:**

1. Package Material : Copper
2. All dimensions are in millimeters [inches].
3. The tolerance noted is just for reference.



**Additional Information**

| Documentation                   | Webpage   |
|---------------------------------|---|
| Connector Torque Specifications | <a href="https://www.rflambda.com/pdf/Torque_Specifications.pdf">https://www.rflambda.com/pdf/Torque_Specifications.pdf</a>                                   |
| Random Vibration Test Standard  | <a href="https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf">https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf</a> |

**Ordering Information**

| Part Number | Modification | Description                                       |
|-------------|--------------|---|
| RWGDCP340SC | WR340        | 2.2GHz-2.7GHz Dual Crossguide Directional Coupler |

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