

## WR430 Waveguide Circulator 1.7GHz–2.6GHz



### Product Description

RFWC430C is a waveguide circulator with a frequency range of 1.7 to 2.6GHz.

The circulator has a typical isolation of 19dB. The maximum insertion loss is 0.3dB.

The circulator's waveguide type is WR430.

### Features

- High power handling up to 3KW CW
- 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 ( $T_A=+25^{\circ}\text{C}$ )

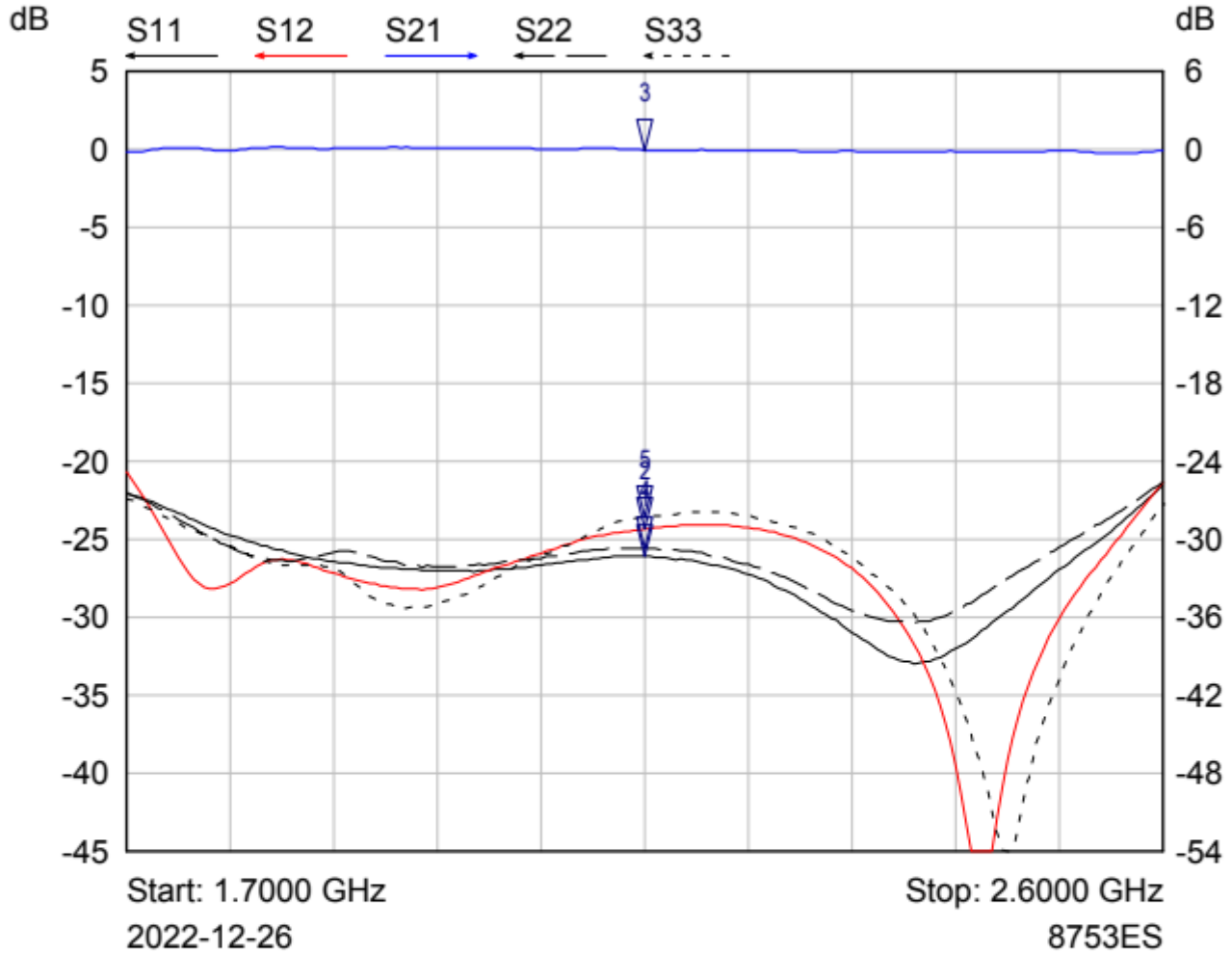
| Parameter          | Min. | Typ.                                                     | Max. | Units |
|--------------------|------|----------------------------------------------------------|------|-------|
| Frequency Range    |      | 1.7-2.6                                                  |      | GHz   |
| Insertion Loss     |      |                                                          | 0.3  | dB    |
| Isolation          | 19   |                                                          |      | dB    |
| VSWR               |      |                                                          | 1.25 | :1    |
| Forward Power (CW) |      |                                                          | 3    | KW    |
| Weight             |      | -                                                        |      | lbs.  |
| Rotation           |      | Clockwise (Standard)<br>Counter Clockwise (upon request) |      |       |
| Waveguide type     |      | WR430                                                    |      |       |
| Flange Type        |      | UG1711/U                                                 |      |       |

## Environmental Specifications and Test Standards

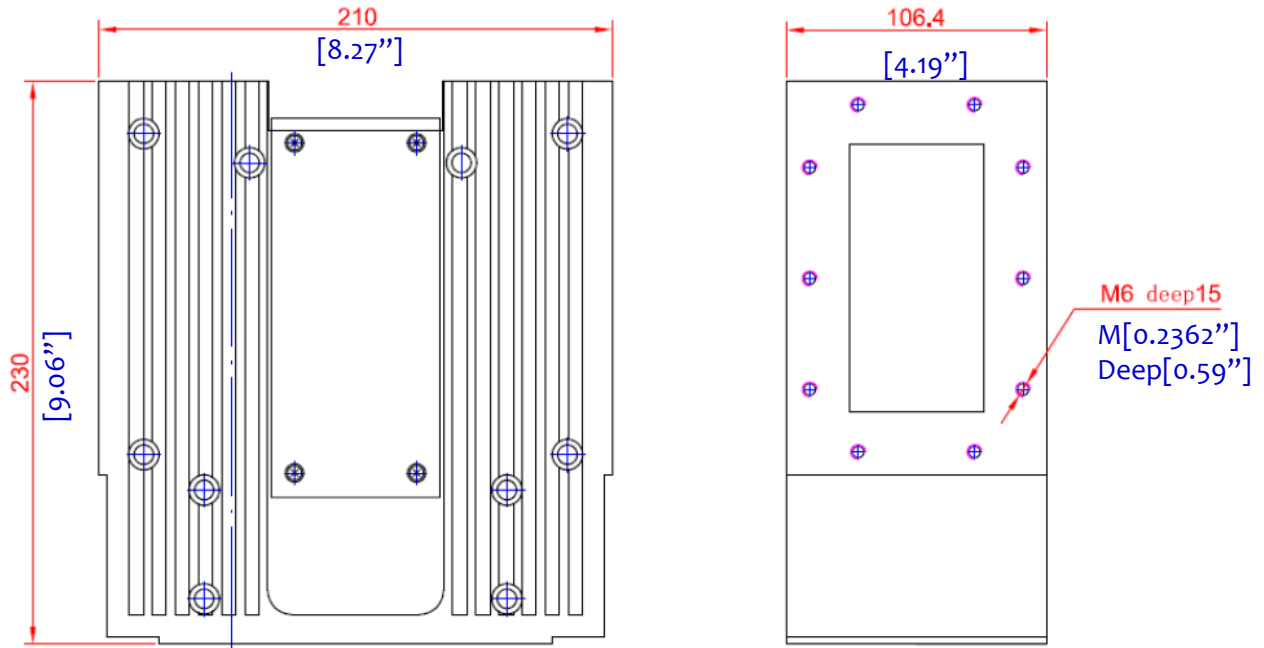
| Parameter                         | Description                                                                                                                                                                                                     |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational Temperature           | -20°C to +60°C<br>(Case Temperature)                                                                                                                                                                            |
| Storage Temperature               | -45°C to +85°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



## Outline Drawing



### Notes:

1. Package Material: Aluminum Alloy
2. Plating: Conductive Oxide
3. All dimensions are in millimeters [inches].

### Additional Information

#### Documentation

ESD Policy

[https://rflambda.com/pdf/rflambda\\_esd\\_control.pdf](https://rflambda.com/pdf/rflambda_esd_control.pdf)

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                        |
|-------------|--------------|------------------------------------|
| RFWC430C    | WR430        | 1.7GHz-2.6GHz Waveguide Circulator |

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