# WR284 Waveguide Circulator
# 2.8 - 3.2GHz

Note: The photo is for illustration purposes only. Please refer to the outline drawing.

RoHS Compliant

## *Features*

- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- All specifications can be modified upon request

## *Typical Applications*

- Aerospace and military applications
- LMDS multi-carrier operation

### *Electrical Specifications, $T_A$=25 ℃*

| Parameter | Min. | Typ. | Max. | Units |
|---|---|---|---|---|
| Frequency Range | 2.8-3.2 | | | GHz |
| Insertion Loss | | | 0.30 | dB |
| Reverse Isolation (Note 1) | 20 | | | dB |
| VSWR | | | 1.20 | :1 |
| Power Handling | | | 3 | KW (CW) |
| Rotation | Clockwise (Standard)<br>Counter Clockwise (upon request) | | | |
| Flange Type | UG1725/U | | | |
| Finish | Conductive Oxide | | | |
| Case Material | Aluminum Alloy | | | |
| Weight | ------ | | | ounces |
| Impedance | ------ | | | Ω |

Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss
Bandwidth (5 ~10) % x Center Frequency (Isolation >22dB)
Bandwidth (20~30) % x Center Frequency (Isolation >21dB)
Bandwidth (40~60) % x Center Frequency (Isolation >20dB)
Ask manufacturer for details

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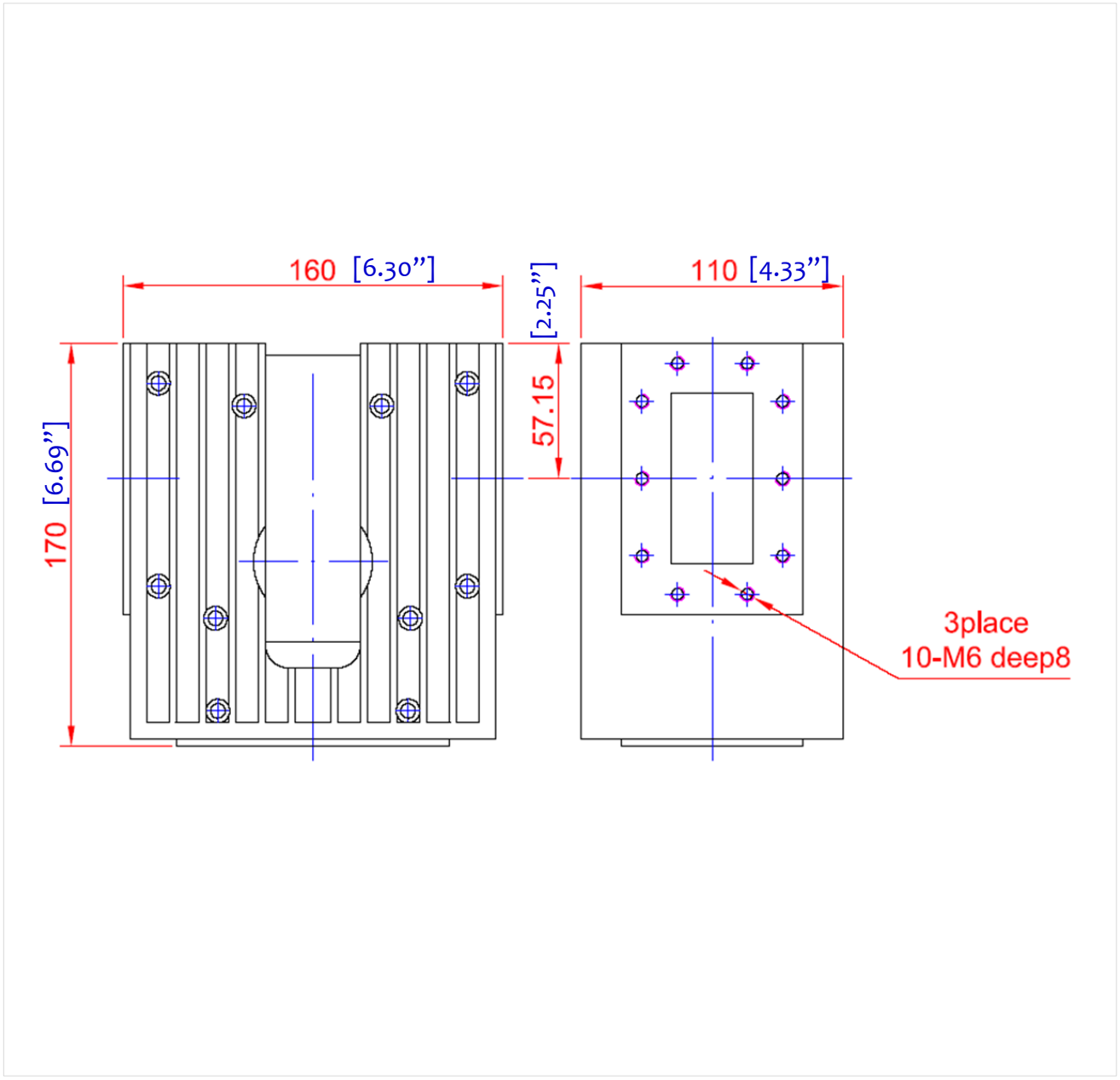
*Environmental Specifications and Test Standards*

| Parameter | Standard | Description |
|---|---|---|
| Operational Temperature | MIL-STD-39016 | -10℃~+55℃ |
| Storage Temperature | | -45℃~+85℃ |
| Thermal Shock | | 1 Hour@ -45℃ → 1 Hour @ +85℃ (5 Cycles) |
| Random Vibration | | Acceleration Spectral Density 6 (m/s)<br>Total 92.6 RMS |
| Electrical & Temperature Burn In | | Temperature +85℃ for 72 Hours |
| 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 (Optional) | MIL-STD-883 | MIL-STD-883 (For Hermetically Sealed Units) |

## Outline Drawing:

All Dimensions in mm [inches]






## Important Notice