



Waveguide WR340 Single Directional Coupler 2.47 – 2.73GHz

Features

- Wide band operation 2.47-2.73GHz
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature



Typical Applications

- Aerospace and military applications
- LMDS multi-carrier operation

Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

| Parameter | Min. | Typ. | Max. | Units |
|----------------------|--|------|------|-------|
| Frequency Range | 2.47~2.73 | | | GHz |
| Coupling | | 30 | | dB |
| Directivity | 18 | | | dB |
| Insertion Loss | | | 0.15 | dB |
| VSWR | | | 1.05 | :1 |
| Average Power | | | 1000 | W |
| Rotation | Clockwise (Standard) Counter Clockwise (upon request) | | | |
| Waveguide Type | Rectangular WR340 | | | |
| Flange type | CPRG, CPRF, COVER, CHOKE available | | | |
| Flange Holes | Through | | | |
| Basis-material | Alloyed Cuprum | | | |
| Internal Body Finish | Plated chromate or conversion | | | |
| External Body Finish | Body Painted with Gray / Black epoxy enamel | | | |

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Environmental Specifications and Test Standards

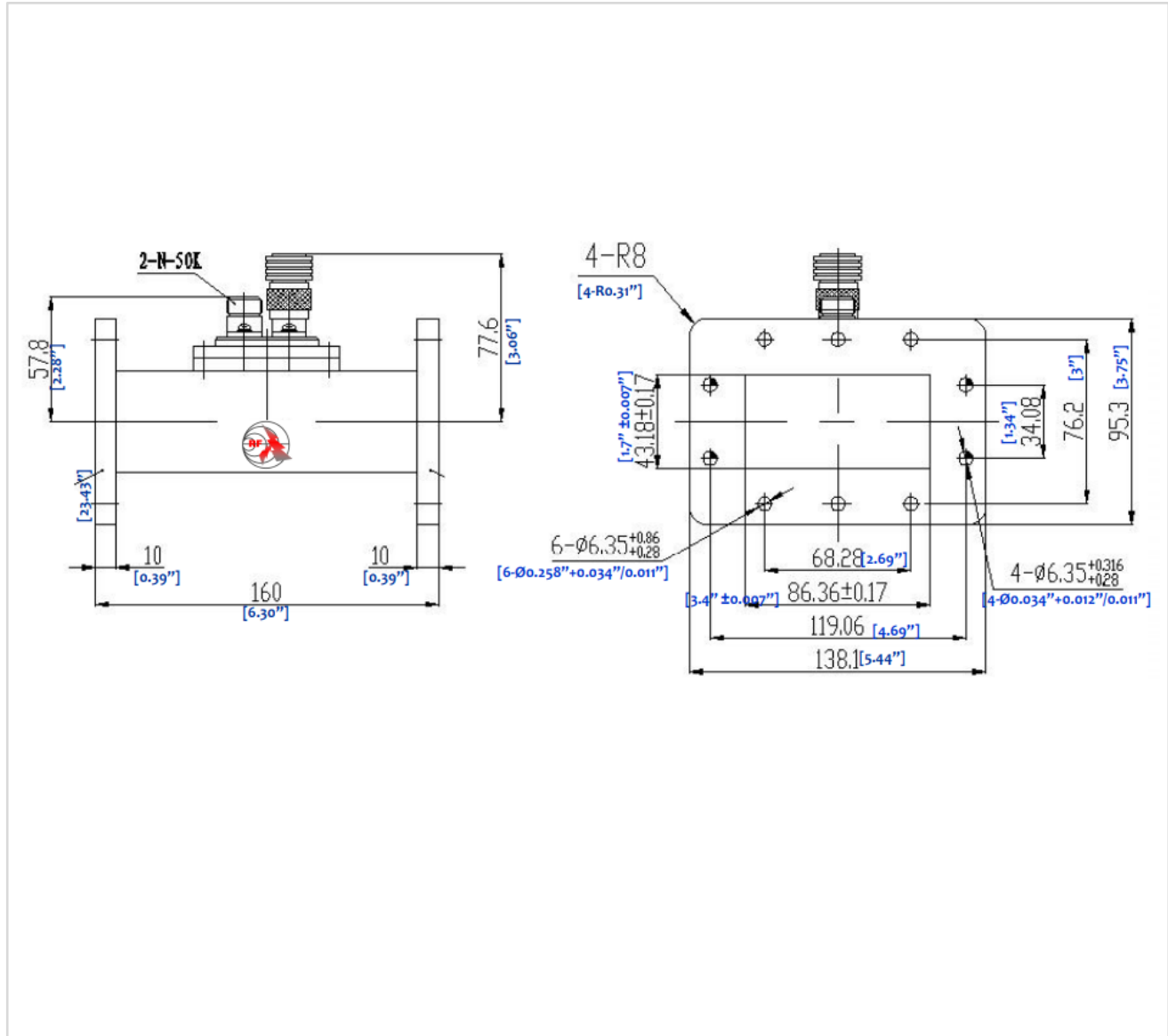
| Parameter | Standard | Description |
|----------------------------------|---------------|---|
| Operational Temperature | MIL-STD-39016 | -40°C~+85°C |
| Storage Temperature | | -60°C~+125°C |
| Thermal Shock | | 1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles) |
| Random Vibration | | Acceleration Spectral Density 6 (m/s) Total 92.6 RMS |
| Electrical & Temperature Burn In | | Temperature +85°C for 72 Hours |
| Shock | | 1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction). |
| Altitude | | Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min) |
| Hermetically Sealed (Optional) | | MIL-STD-883 |

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Outline Drawing:

All Dimensions in mm [inches]



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