



## WR187 Waveguide Circulator 3.95 – 5.80GHz 1000W

Features

- High power handling capability up to 1000W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature
- High peak to average handling capability
- All specifications can be modified upon request



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	3.95-5.80			GHz
Insertion Loss			0.50	dB
Isolation (Note 1)	18			dB
VSWR			1.25	:1
Average Power			1000	W
Rotation	Clockwise (Standard) Counter Clockwise (available upon request)			
Input / Output Interface	COVER flat 4 holes			
Flange Type	UG 1729/U			
Finish	Conductive Oxidation			
Case Material	Aluminum alloy			
Weight				ounces
Impedance	50			$\Omega$
<p><b>Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation &amp; lower insertion loss</b>            Bandwidth (5 ~10) % x Center Frequency (Isolation &gt;24dB)            Bandwidth (20~30) % x Center Frequency (Isolation &gt;22dB)            Bandwidth (40~60) % x Center Frequency (Isolation &gt;20dB)            Ask manufacturer for details</p>				

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**Environmental Specifications and Test Standards**

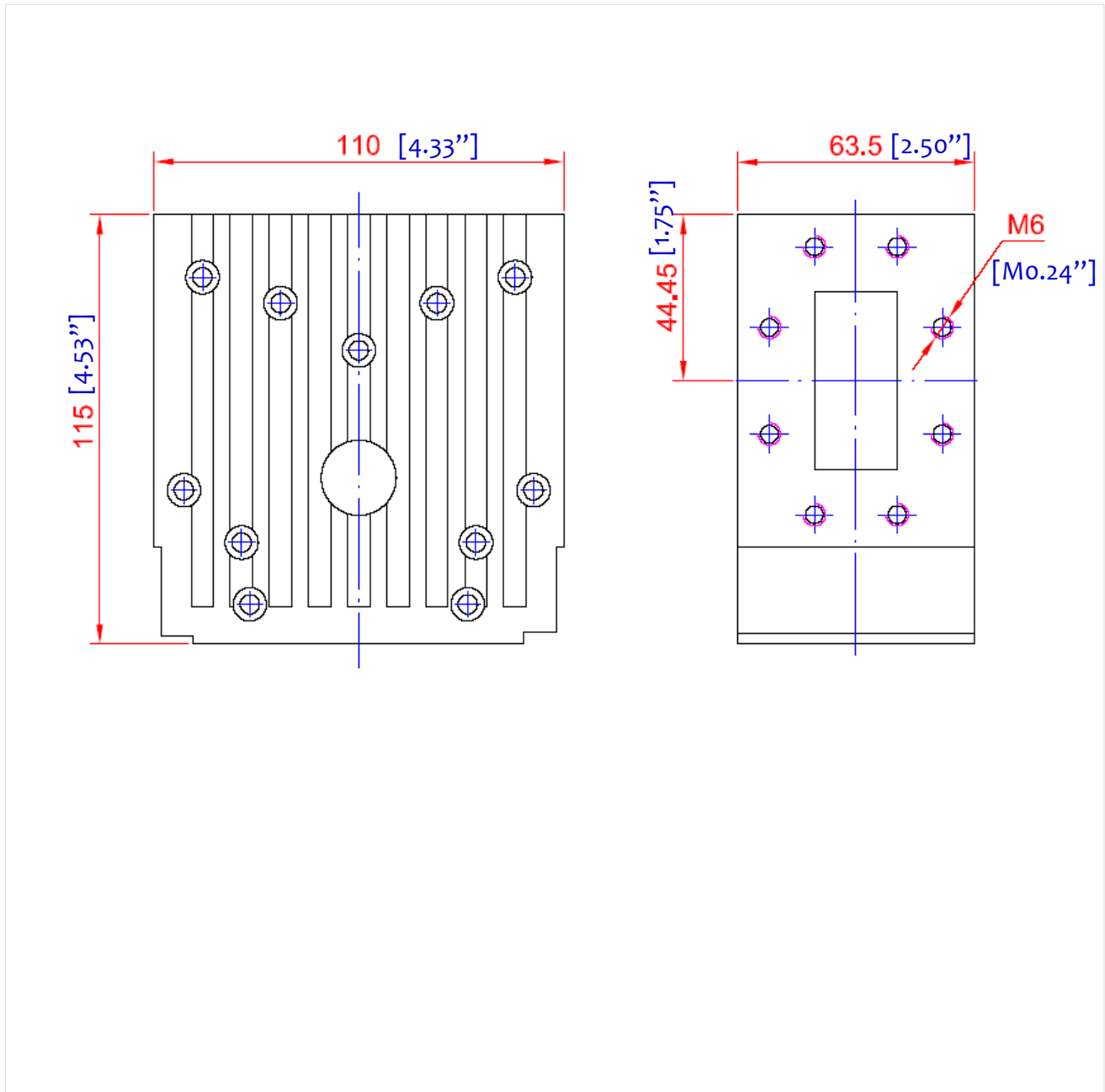
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+60°C
Storage Temperature		-20°C~+60°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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	MIL-STD-883 (For Hermetically Sealed Units)

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**Outline Drawing:**

All Dimensions in mm [inches]



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