



WR112 High Power Waveguide Circulator 7.05 – 10GHz



Features

- High power handling up to 250W CW.
- Wide band operation
- 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	7.05~10			GHz
Bandwidth	Full			
Insertion Loss			0.5	dB
Isolation	20			dB
VSWR			1.25	:1
Forward Power (CW)			250	W
Reverse Power (CW)			250	W
Peak Power Handling	4KW (8% duty cycle)			
Rotation	Clockwise (Standard) Counter Clockwise (Upon Request)			
Waveguide type	Rectangular Waveguide WR112			
Flange Type	CPR112-F Mating			
Case Material	Aluminum Alloy			

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Environmental Specifications and Test Standards

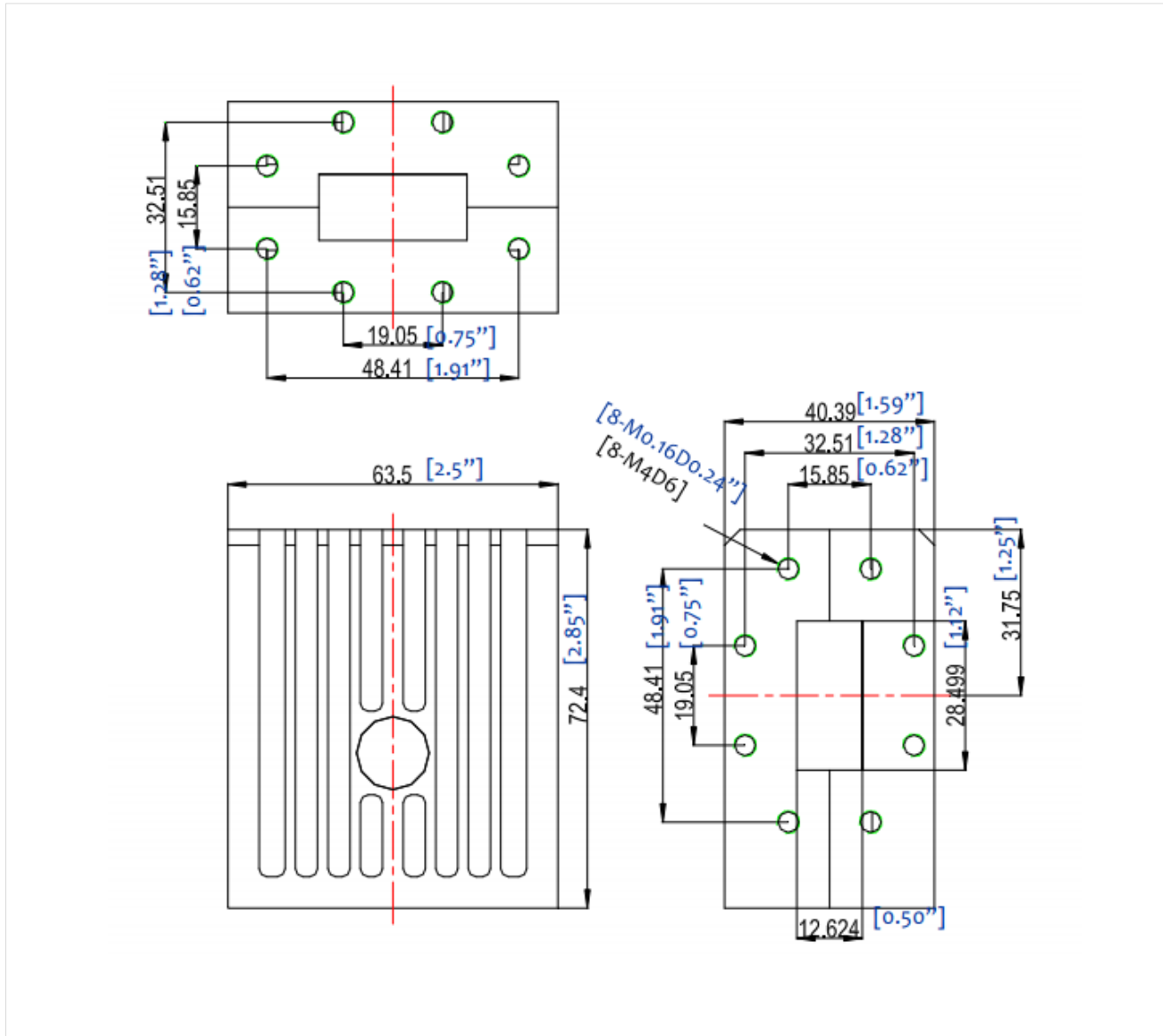
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+60°C
Storage Temperature		-45°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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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