



Ultra Wide Band Circulator 9.1~ 9.6GHz

Features

- High power handling capability up to 50W
- 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	9.1~9.6			GHz
Insertion Loss			0.4	dB
Reverse Isolation	45			dB
VSWR			1.25	:1
Forward Power (CW)			50	W
Reverse Power (CW)			5	W
Power Handling(CW)			5	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Connectors	N-Female			
Finish				
Case Material	Aluminum alloy			
Weight				Ounces
Impedance	50			Ω
<p>Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss</p> <p>Bandwidth (5 ~10) % x Center Frequency (Isolation >48dB)</p> <p>Bandwidth (20~30) % x Center Frequency (Isolation >47dB)</p> <p>Bandwidth (40~60) % x Center Frequency (Isolation >46dB)</p> <p>Ask manufacturer for details</p>				

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Environmental Specifications and Test Standards

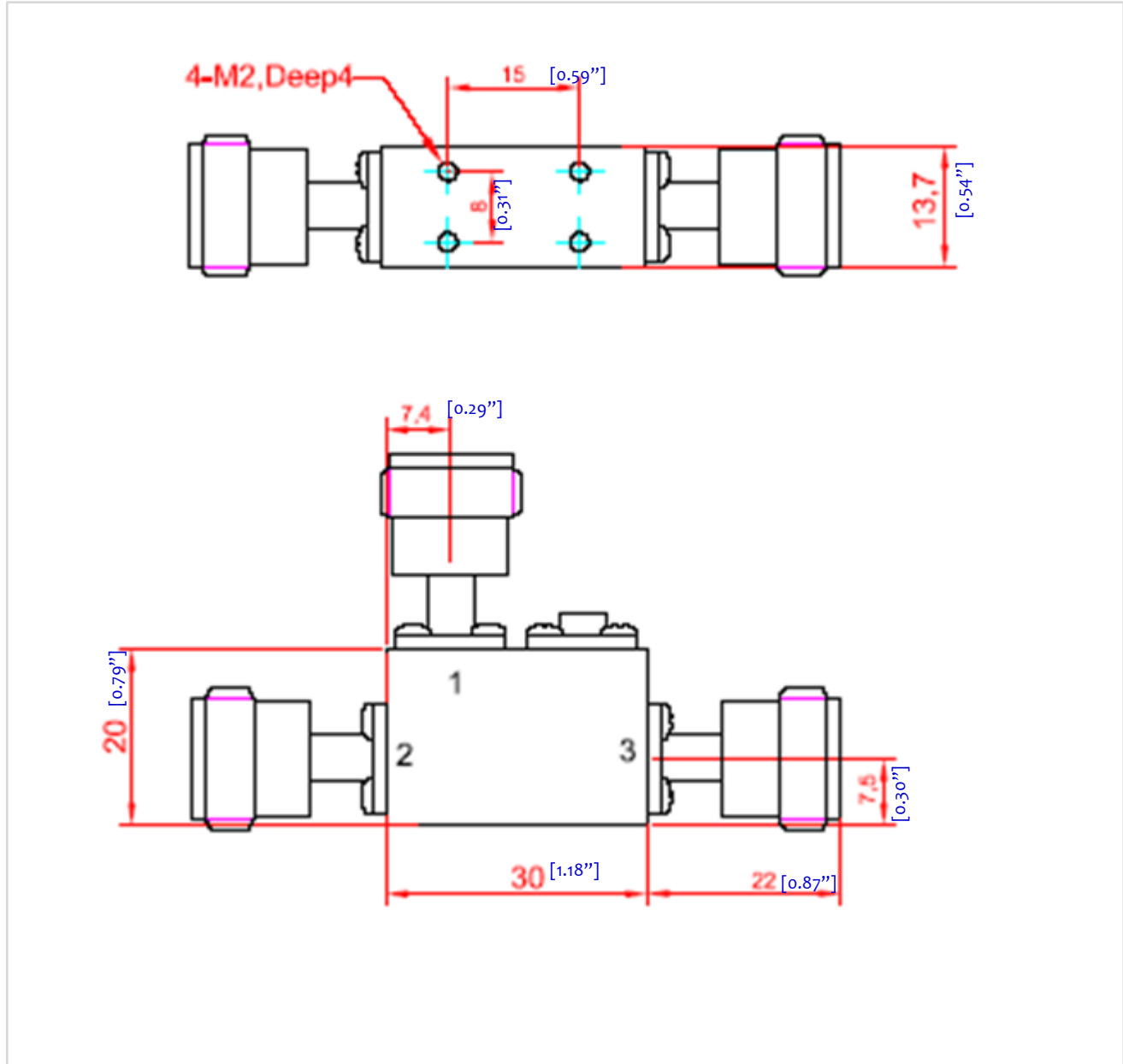
Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20°C~+60°C
Storage Temperature		-55°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C for 72 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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