



WR90 Waveguide Isolator 8.2-12.4GHz 50W



- High power handle capability up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Low temperature coefficient ferrite material offer stable performance over temperature
- Aerospace and military application
- LMDS multi-carrier operation
- High peak to average handle capability
- All specifications can be modified upon request

Parameter	Min	Type	Max	Units
Frequency Range	8.2-12.4			GHz
Insertion Loss		0.25	0.30	dB
Isolation (Note 1)	20	21		dB
VSWR		1.15	1.20	:1
Forward Power (CW)			50	W
Reverse Power (CW)			5	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input /Output Connector	COVER flat 4 holes			
Finishing	oxidation by color / Blue paint			
Flange Type	UG39/U			
Case Material	Aluminum alloy			
Operational Temp.	-25		60	°C
Storage Temp.	-45		85	°C
Altitude	15000		TBD	ft.
Weight				g
Impedance				Ω
Vibration	10g 15 degree 2KHz			RMS
Humidity	100% RH at 35°C, 95%RH at 40°C			
Shock	20G for 11msc.			

Note 1: Unit has narrow frequency bandwidth can achieve higher isolation & low insertion loss

Bandwidth (5 ~10) % x Center Frequency (Isolation >23dB)

Bandwidth (20~30) % x Center Frequency (Isolation >21dB)

Bandwidth (40~60) % x Center Frequency (Isolation >20dB)

Ask manufacture for detail

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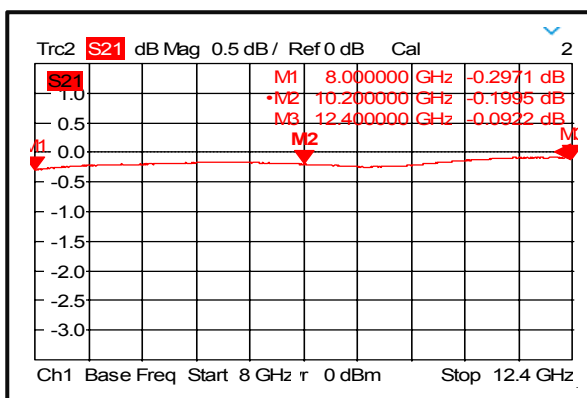


Environment specifications

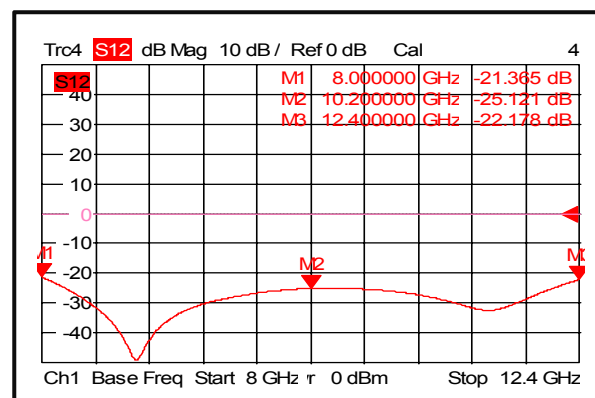
Operational Temperature (C°)	-25 ~ +60
Storage Temperature (C°)	-45 ~ +85
Altitude	30,000 ft. (Epoxy Seal Controlled environment)
	60,000 ft 1.0psi min (Hermetically Seal Un-controlled environment) (Optional)
Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40 deg c
Shock	20G for 11msc half sin wave,3 axis both directions

performance plots

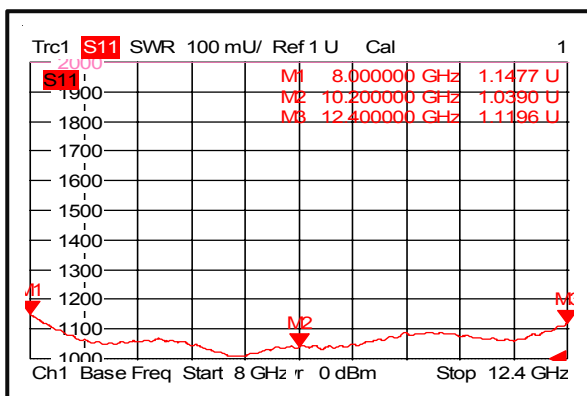
Insertion Loss



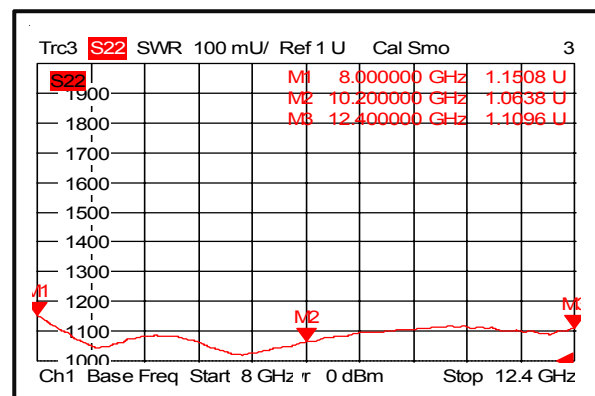
Isolation



VSWR 1



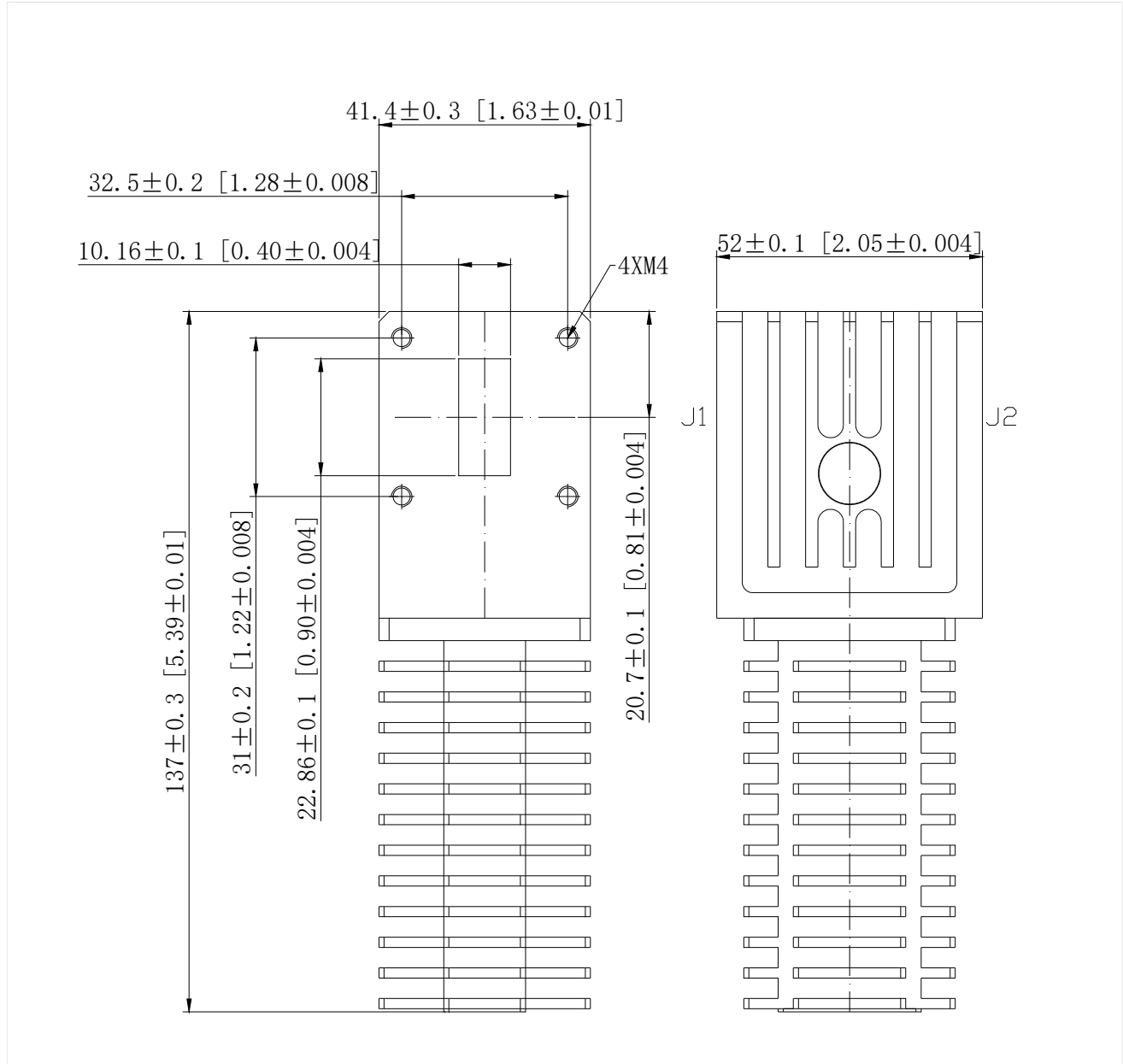
VSWR2





Outline Drawing:

All Dimensions in mm (inches)



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