



WR90 Waveguide Circulator 8 - 12.4GHz 250W



Features

- High power handling capability up to 250W
- 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	Type	Max	Units
Frequency Range	8-12.4			GHz
Insertion Loss		0.25	0.30	dB
Isolation (Note 1)	20	21		dB
VSWR		1.15	1.18	:1
Forward Power (CW)			250	W
Rotation	Clockwise (Standard) Counter Clockwise (available upon request)			
Input / Output Interface	COVER flat 4 holes			
Flange Type	UG39/U			
Finishing	Natural conductive oxidation			
Case Material	Aluminum alloy			
Weight	7.05			ounces
Impedance	50			Ω
Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss Bandwidth (5 ~10) % x Center Frequency (Isolation >25dB) Bandwidth (20~30) % x Center Frequency (Isolation >23dB) Bandwidth (40~60) % x Center Frequency (Isolation >21dB) Ask manufacturer for details				

WR90 Waveguide Circulator 8 - 12.4GHz 250W

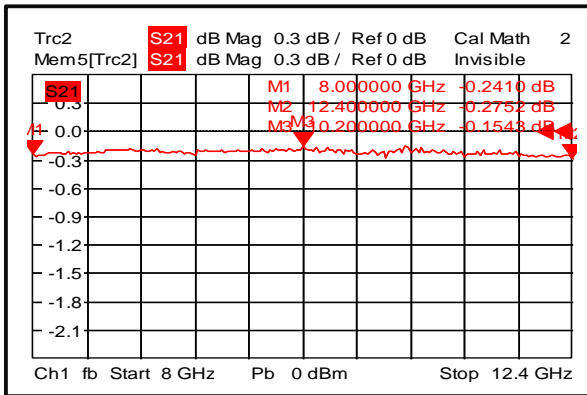


Environmental Specifications

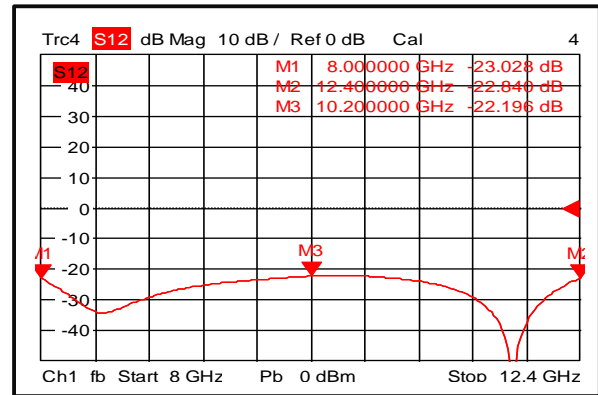
Operational Temperature (°C)	-10 ~ +55
Storage Temperature (°C)	-50 ~ +125
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35c, 95%RH at 40°C
Shock	20G for 11mec half sine wave, 3 axis both directions

Typical Performance Plots

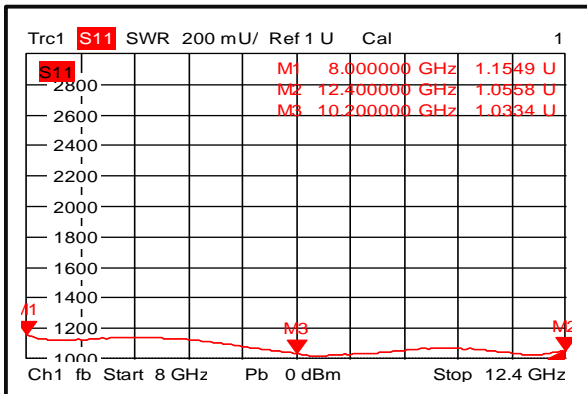
Insertion Loss



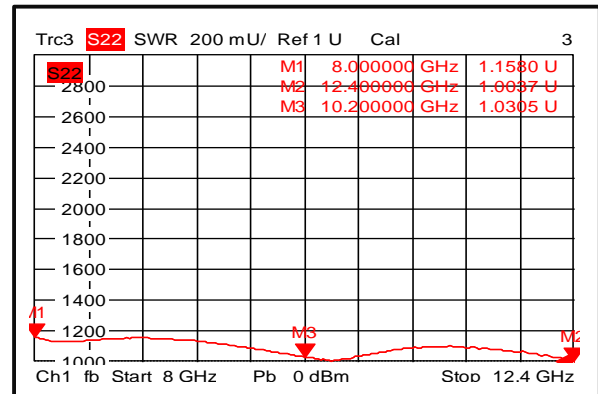
Isolation



VSWR 1



VSWR2

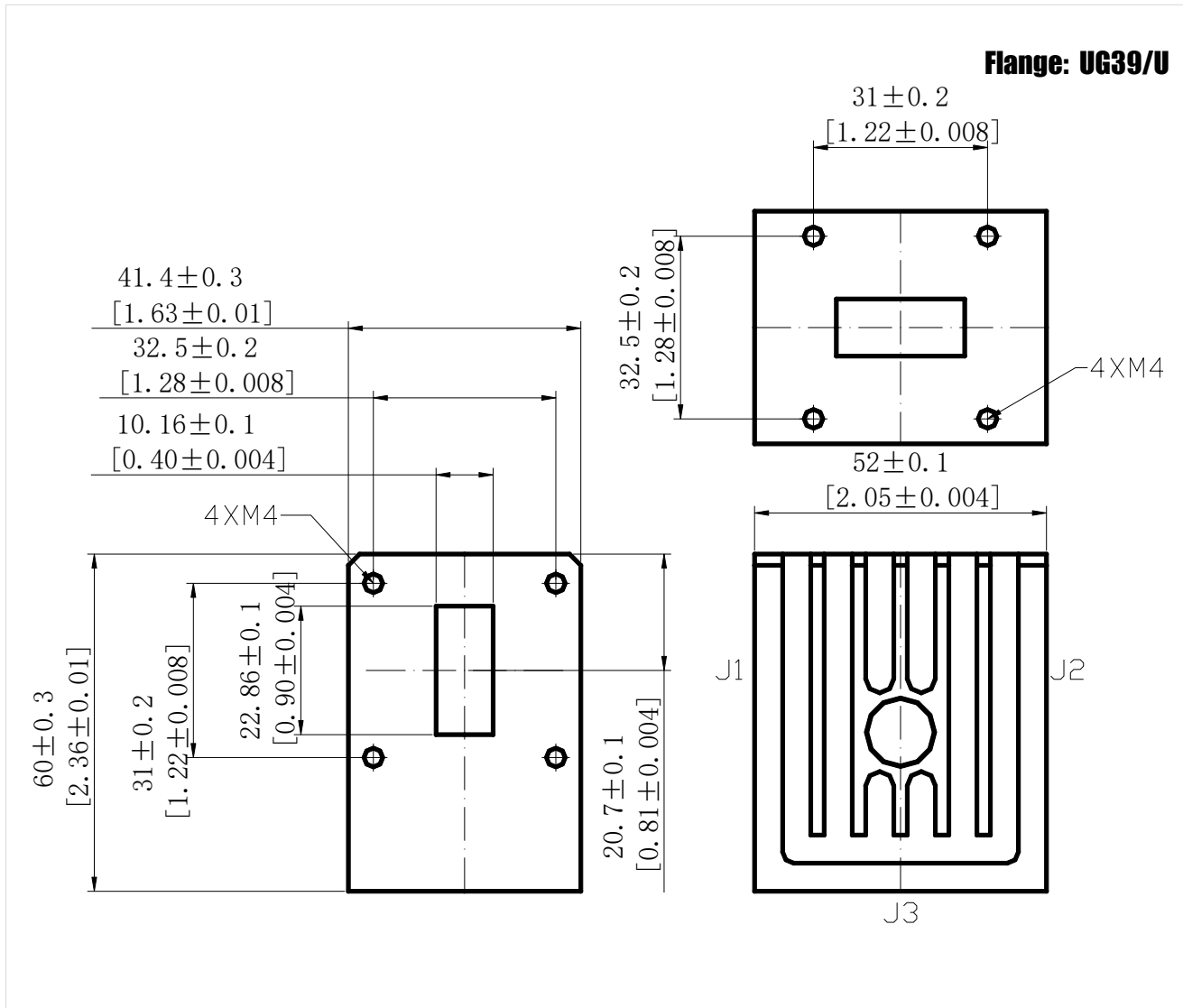


WR90 Waveguide Circulator 8 - 12.4GHz 250W



Outline Drawing:

All Dimensions in mm [inches]



WR90 Waveguide Circulator 8 - 12.4GHz 250W

Important Notice

The information contained herein is believed to be reliable. RF-Lambda makes no warranties regarding the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for any of the information contained herein. RF-Lambda assumes no responsibility or liability whatsoever for the use of the information contained herein. The information contained herein is provided "AS IS, WHERE IS" and with all faults, and the entire risk associated with such information is entirely with the user. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for RF-Lambda products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information.

RF-Lambda products are not warranted or authorized for use as critical components in medical, life-saving, or life sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.