WR284 Waveguide Circulator
2.6 - 3.95GHz

Features

- High power handling capability up to 575W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature
- High peak to average handling capability

RoHS Compliant

Typical Applications

- Aerospace and military applications
- Test and Measurement
- Wireless Infrastructure

Electrical Specifications, T_A=25 ℃

Parameter	Min	Typ	Max	Units
Frequency Range		2.6 - 3.95		GHz
Insertion Loss		0.45	0.50	dB
Isolation (Note 1)	21	22		dB
VSWR		1.15	1.20	:1
Power handling（CW）			575	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Interface	COVER flat 4 holes			
Flange Type	UAR32			
Finishing	Conductive Oxide (not painted)			
Case Material	Aluminum Alloy			

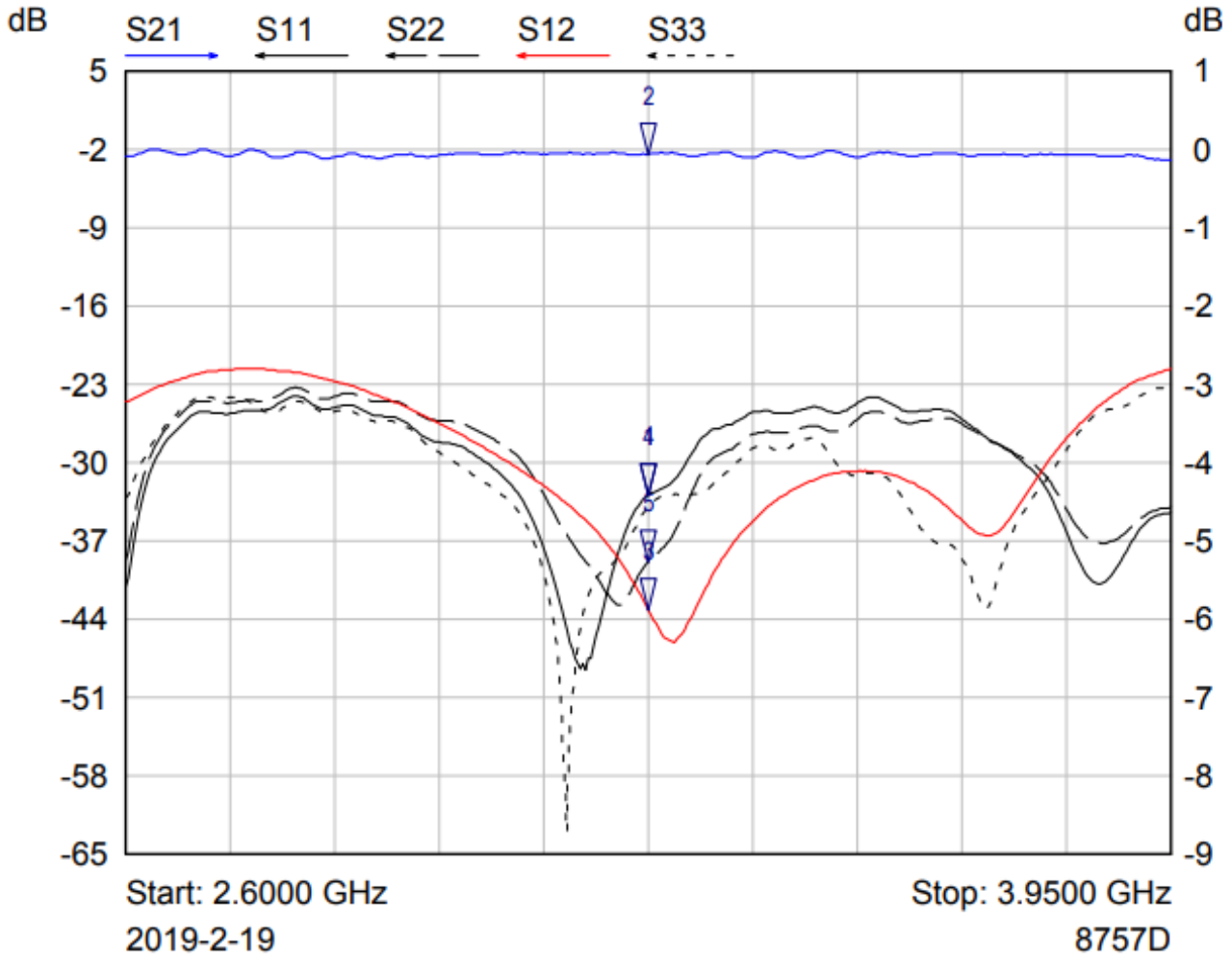
Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss
Bandwidth (5 ~10) % x Center Frequency (Isolation >23dB)
Bandwidth (20~30) % x Center Frequency (Isolation >22dB)
Bandwidth (40~60) % x Center Frequency (Isolation >21dB)
Ask manufacturer for details

WR284 Waveguide Circulator 2.6 - 3.95GHz

Environmental Specifications and Test Standards

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

Typical Performance Plots

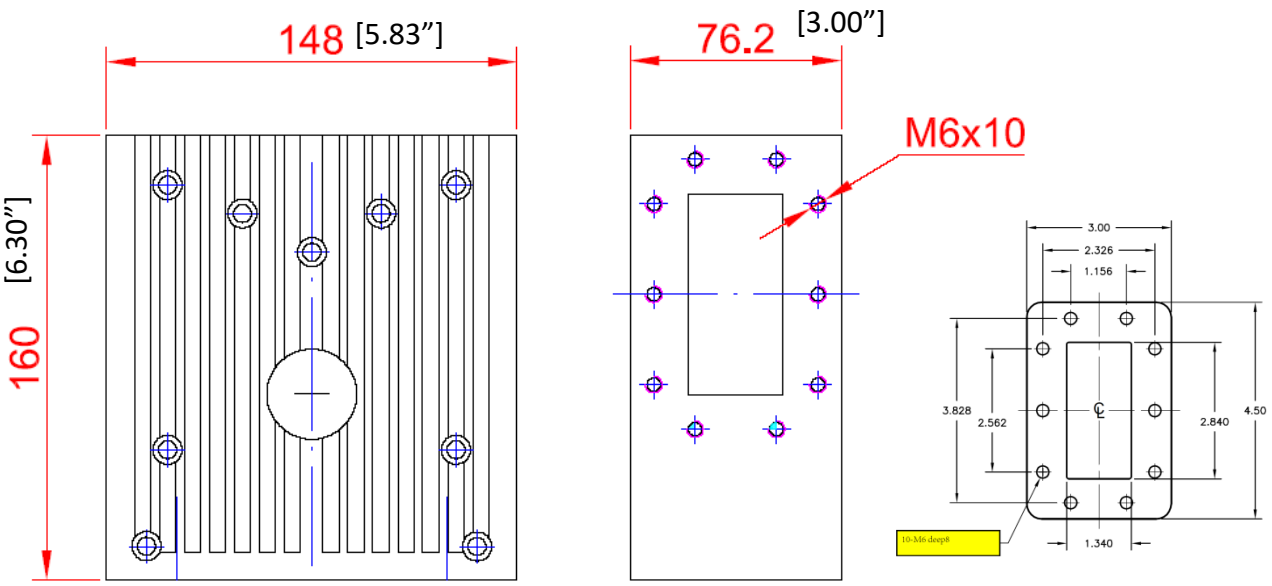


Mkr	Trace	X-Axis	Value	Notes
1	S11	3.2750 GHz	-32.91 dB	
2	S21	3.2750 GHz	-0.06 dB	
3	S12	3.2750 GHz	-43.14 dB	
4	S11	3.2750 GHz	-32.91 dB	
5	S22	3.2750 GHz	-38.84 dB	

WR284 Waveguide Circulator 2.6 - 3.95GHz

Outline Drawing:

All Dimensions in mm [inches]



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.