



WR90 Waveguide Circulator 8.9 – 9.5GHz 300W

Features

- High power handling capability up to 300W
- 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		8.9-9.5			GHz
Insertion Loss	port1->port2			0.50	dB
	port2->port3			0.30	dB
Reverse Isolation	port2->port1	40			dB
	port3->port2	23			dB
	port3->port1	23			dB
	port1->port3	23			dB
VSWR				1.15	:1
Power Handling	for circulator	> 300W cw, 60kW pulse			
	for load	> 100W cw, 20kW pulse			
Rotation		Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Interface		COVER flat 4 holes			
Flange Type		UG135/U			
Finishing		conductive oxidation			
Case Material		Aluminum Alloy			
Weight					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 >32dB)
 Bandwidth (20 ~ 30) % x Center Frequency (Isolation >28dB)
 Bandwidth (40 ~ 60) % x Center Frequency (Isolation >23dB)
 Ask manufacturer for details

WR90 Waveguide Circulator 8.9 - 9.5GHz 300W

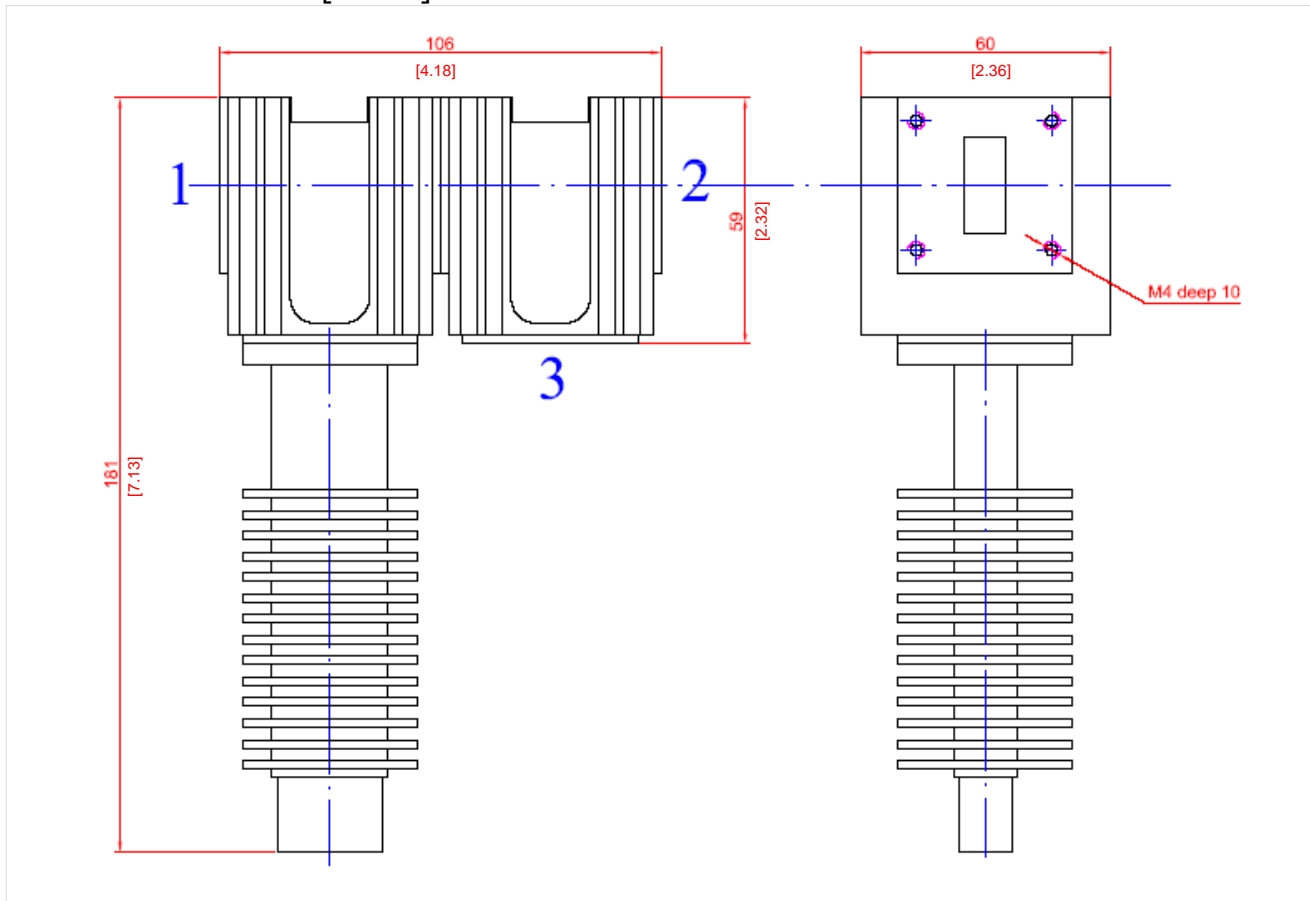


Environmental Specifications

Operational Temperature (°C)	-20 ~ +50
Storage Temperature (°C)	-20 ~ +50
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 deg c
Shock	20G for 11msec half sine wave, 3 axis both directions

Outline Drawing:

All Dimensions in mm [inches]



WR90 Waveguide Circulator 8.9 - 9.5GHz 300W

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.