WR22 Waveguide Isolator
33 - 50GHz

Note: The photo is for illustration purposes only.
Please refer to outline drawing

Features

- High power handling capability up to 25W
- Wide band operation
- High isolation within operational band
- Low Insertion loss
- Stable performance over temperature

Typical Applications

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

Electrical Specifications, T_A=25 ℃

Parameter	Min.	Typ.	Max.	Units
Frequency Range		33-50		GHz
Insertion Loss		1.40	1.50	dB
Reverse Isolation (Note 1)	14.5	15		dB
VSWR		1.40	1.45	: 1
Forward Power (CW)			25	W
Reverse Power (CW)			3	W
Rotation	Clockwise (Standard) The port 3 is a load			
Input / Output Interface	COVER flat 4 holes			
Finish	Oxidation			
Flange Type	UG383/U			
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 >16dB)
Bandwidth (20~30) % x Center Frequency (Isolation >15.5dB)
Bandwidth (40~60) % x Center Frequency (Isolation >15dB)
Ask manufacturer for details

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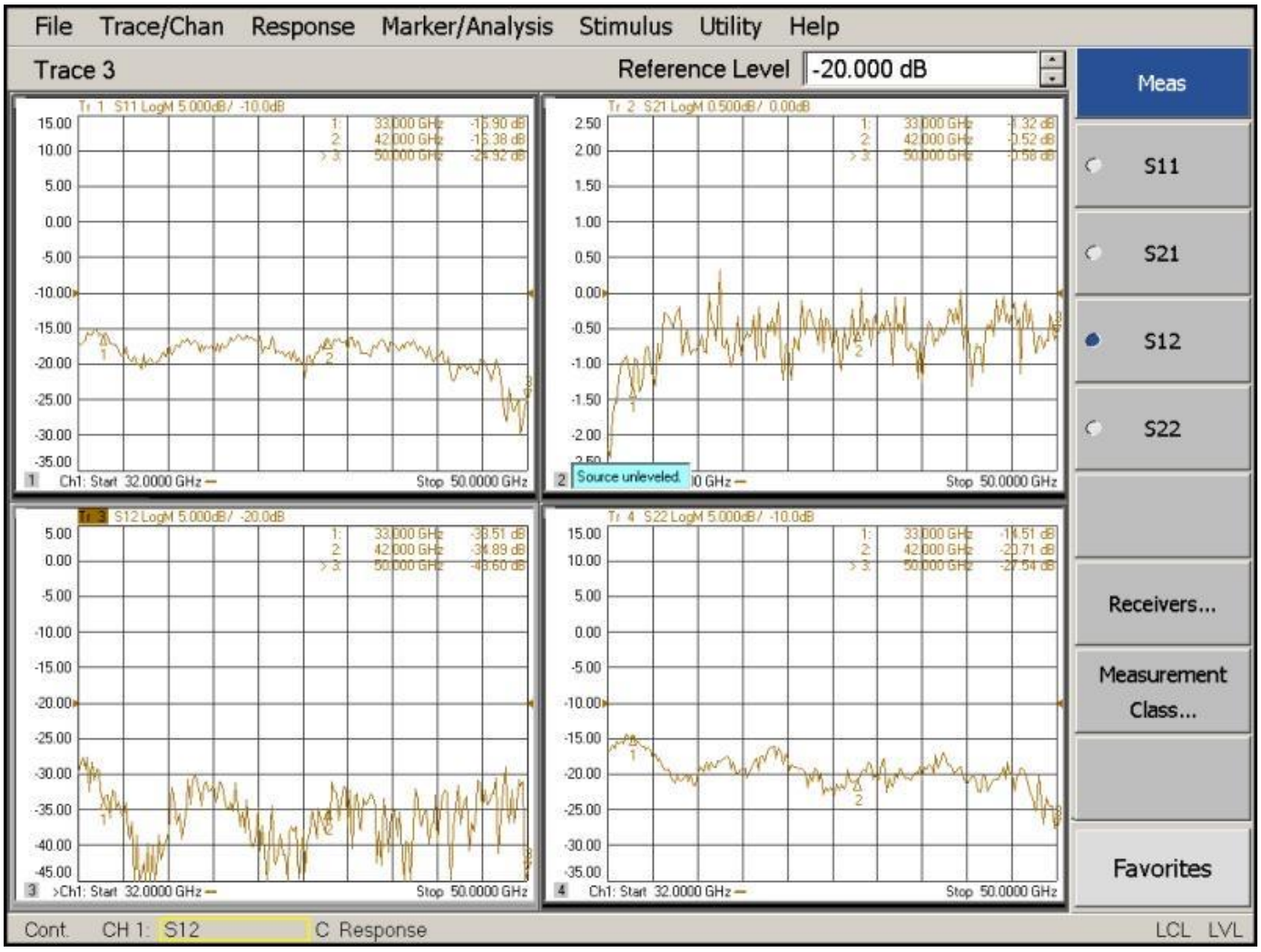
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20℃~+60℃ (Case Temperature)
Storage Temperature	-45℃~+85℃
Thermal Shock	-20℃ → +60℃ (5 Cycles / 10 hours)
Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
High 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 (For Hermetically Sealed Units)

Typical Performance Plots



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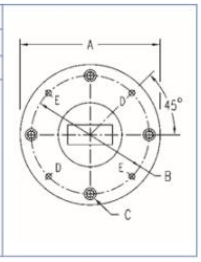
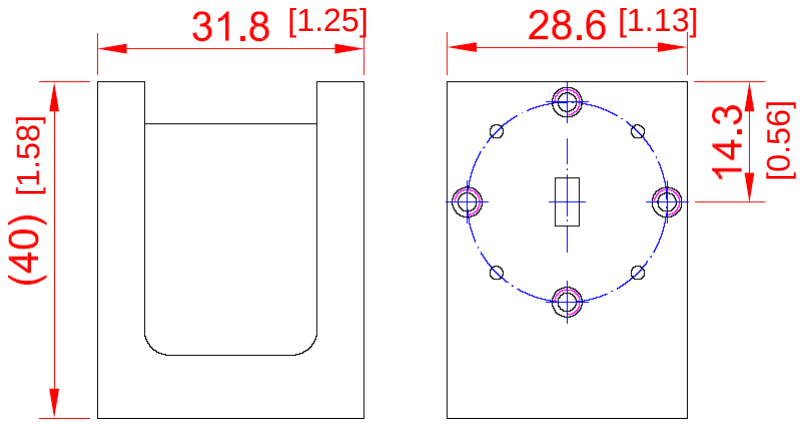
Outline Drawing:

All Dimensions in mm [inches]

Flange: UG383/U

WR22	WG23	R400
	UG383/U	
Dimensions	inches	mm
A	1.13	28.85
B	0.94	23.81
C Holes	4-40 UNC-2B	
D Holes	0.063	1.613
E Dowels	0.061	1.555





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