WR28 Waveguide Circulator
26.5 - 40GHz

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

RoHS Compliant

Features

- High power handling up to 10W
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature

Typical Applications

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

Electrical Specifications, T_A=25 ℃

Parameter	Min.	Typ.	Max.	Units
Frequency Range	26.5 – 40			MHz
Insertion Loss			0.6	dB
Isolation (Note 1)	16			dB
VSWR			1.4	:1
Average Power (CW)			10	W
Peak Power	50 (5% 5us)			W
Rotation	Clockwise (Standard) Counter Clockwise (Upon Request)			
Input / Output Interface	COVER flat 4 holes			
Flange Type	CPRG, CPRF, COVER, CHOKE available			
Finish	Gray / Black Epoxy Enamel			
Case Material	Aluminum, Brass, Stainless			
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 >19dB)
Bandwidth (20~30) % x Center Frequency (Isolation >17dB)
Bandwidth (40~60) % x Center Frequency (Isolation >16dB)
Ask manufacturer for details

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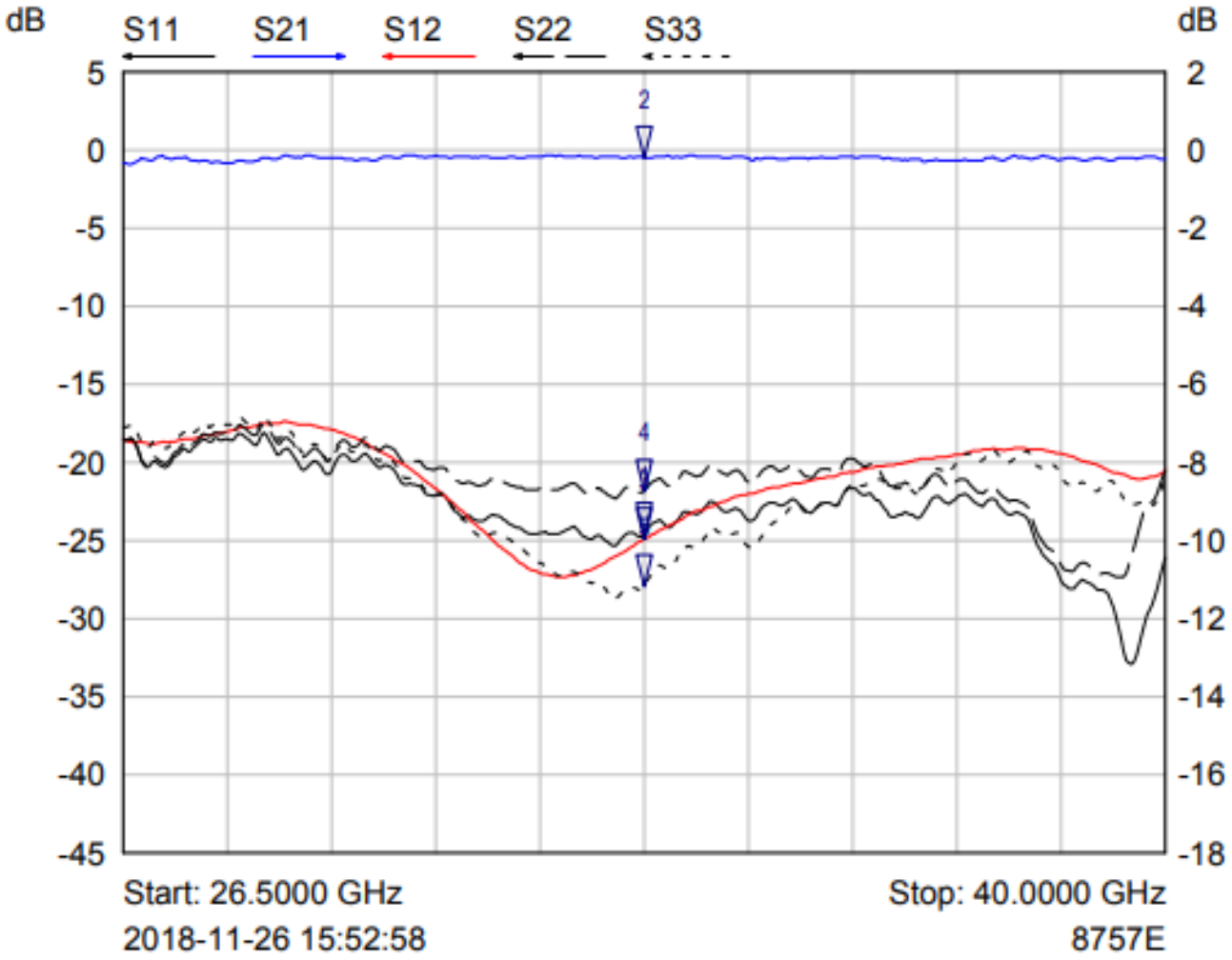
Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	-20℃~+60℃
Storage Temperature		-40℃~+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	33.2500 GHz	-24.59 dB	
2 ▽	S21	33.2500 GHz	-0.19 dB	
3 ▽	S12	33.2500 GHz	-24.90 dB	
4 ▽	S22	33.2500 GHz	-21.82 dB	
5 ▽	S33	33.2500 GHz	-27.90 dB	

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Outline Drawing:

All Dimensions in mm [inches]