



High Power Coaxial Circulator 300-800MHz (50MHz BW)



Note: Photo is for illustration purposes only.



Features

- High power handling up to 1000W
- 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, $T_A=25\text{ }^\circ\text{C}$

Parameter	Min.	Typ.	Max.	Units
Frequency Range	300-800 (50MHz Bandwidth) (780 – 830MHz Shown)			MHz
Insertion Loss			0.4	dB
Isolation (Note 1)	20			dB
VSWR			1.25	:1
Power Handling (CW)			1000	W
Rotation	Clockwise (Standard) Counter Clockwise (Upon Request)			
Input / Output Connectors	7/16 or N-Female			
Finish	Gray / Black Epoxy Enamel			
Case Material	Aluminum Alloy / Copper			
Impedance	50			Ω

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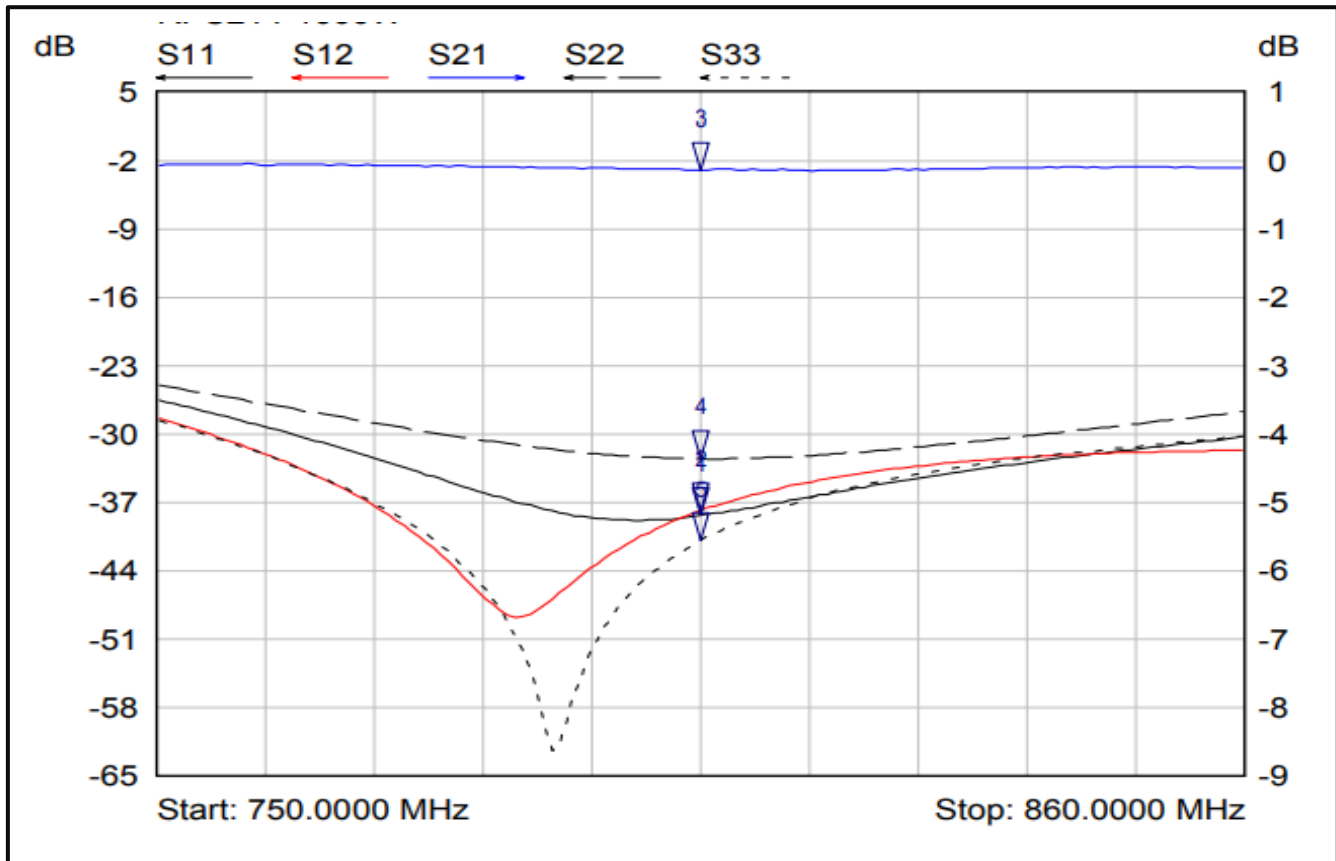
Environmental Specifications and Test Standards

Parameter	Standard	Description
Operational Temperature	MIL-STD-39016	+10°C~+60°C
Storage Temperature		-50°C~+125°C
Thermal Shock		1 Hour@ -45°C → 1 Hour @ +85°C (5 Cycles)
Random Vibration		Acceleration Spectral Density 6 (m/s) Total 92.6 RMS
Electrical & Temperature Burn In		Temperature +85°C 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

Insertion Loss & Isolation VSWR

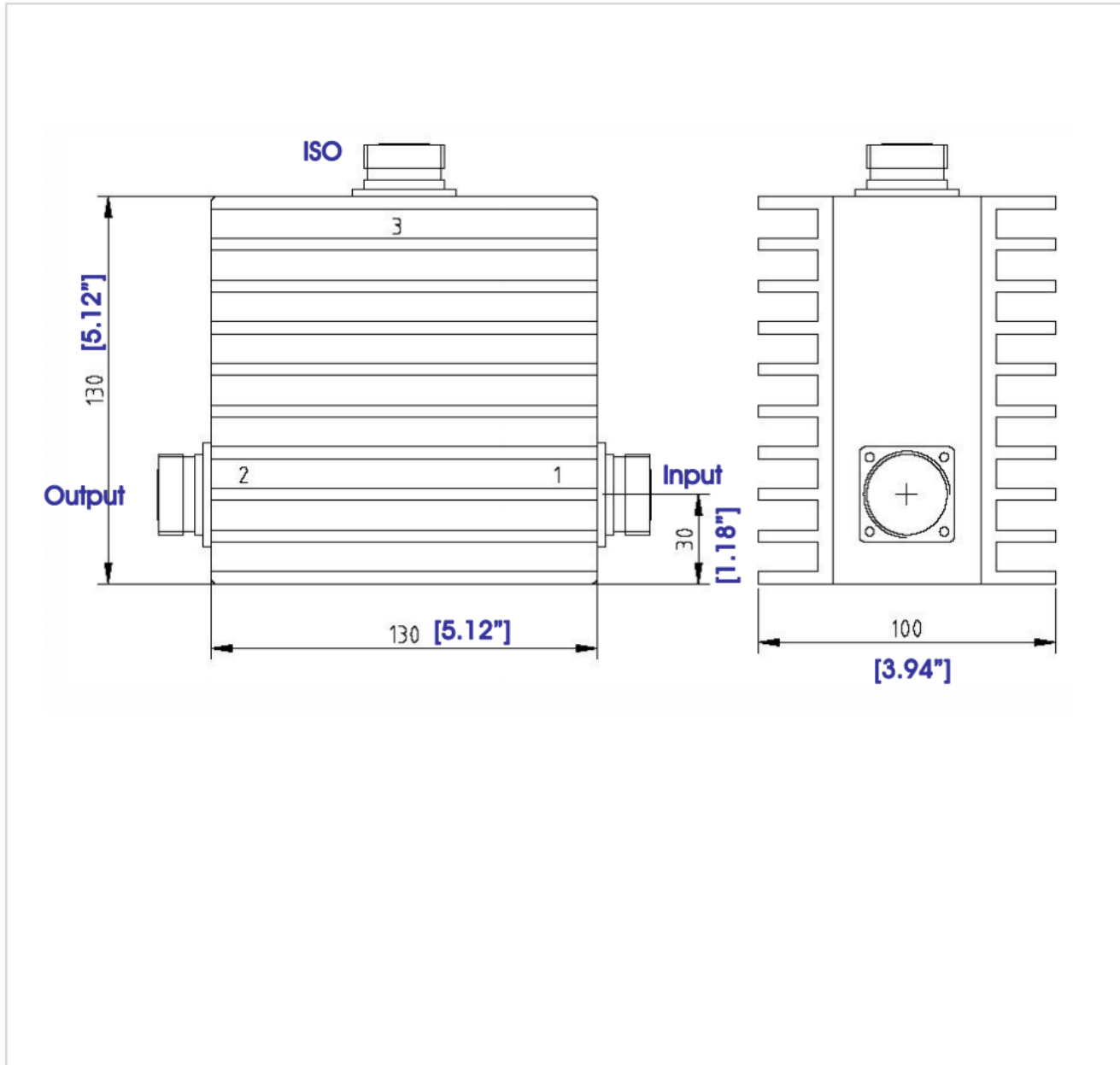


MKr	Trace	X-Axis	Value
1 ▽	S11	805.0000 MHz	-38.31 dB
2 ▽	S12	805.0000 MHz	-37.79 dB
3 ▽	S21	805.0000 MHz	-0.13 dB
4 ▽	S22	805.0000 MHz	-32.48 dB
5 ▽	S33	805.0000 MHz	-40.83 dB



Outline Drawing:

All Dimensions in mm [inches]



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