

## 1KW High Power Circulator 780 ~ 830MHz



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

### Features

- High power handling up to 1KW
- 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

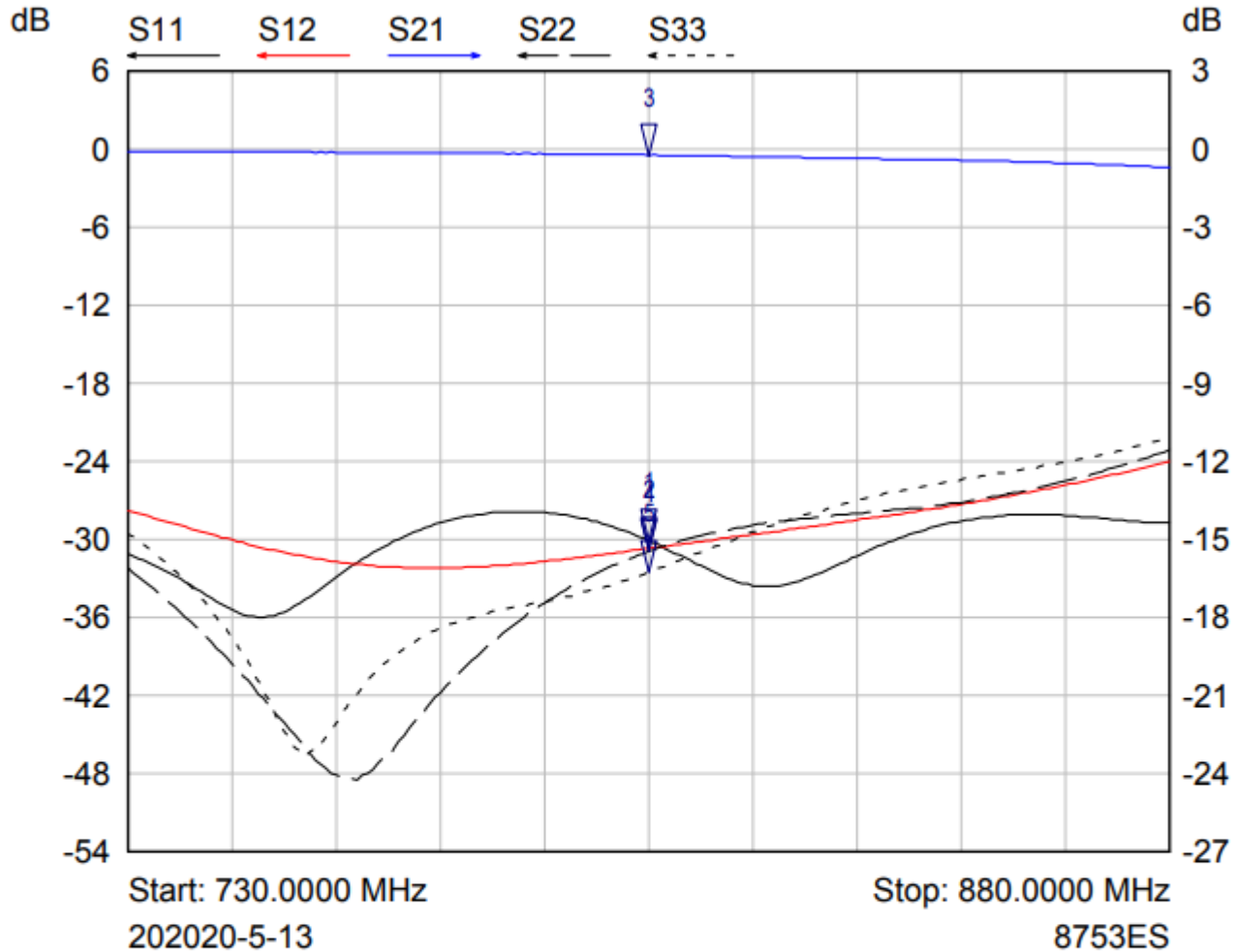
### Electrical Specifications, $T_A=25\text{ }^\circ\text{C}$

Parameter	Min.	Typ.	Max.	Units
Frequency Range	780-830			MHz
Insertion Loss			0.5	dB
Isolation (Note 1)	19			dB
VSWR			1.25	:1
Power handling (CW)			1	KW
Rotation	Clockwise (Standard) Counter Clockwise (Upon Request)			
Input / Output Connectors	-			
Case Material	Aluminum Alloy			
Impedance	50			$\Omega$
<p>Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation &amp; lower insertion loss</p> <p>Bandwidth (5 ~10) % x Center Frequency (Isolation &gt;23dB)</p> <p>Bandwidth (20~30) % x Center Frequency (Isolation &gt;21dB)</p> <p>Bandwidth (40~60) % x Center Frequency (Isolation &gt;19dB)</p> <p>Ask manufacturer for details</p>				

**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-20°C~+70°C (Case Temperature)
Storage Temperature	-40°C~+85°C
Thermal Shock	-20°C → +70°C (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°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 (For Hermetically Sealed Units)

Typical Performance Plots



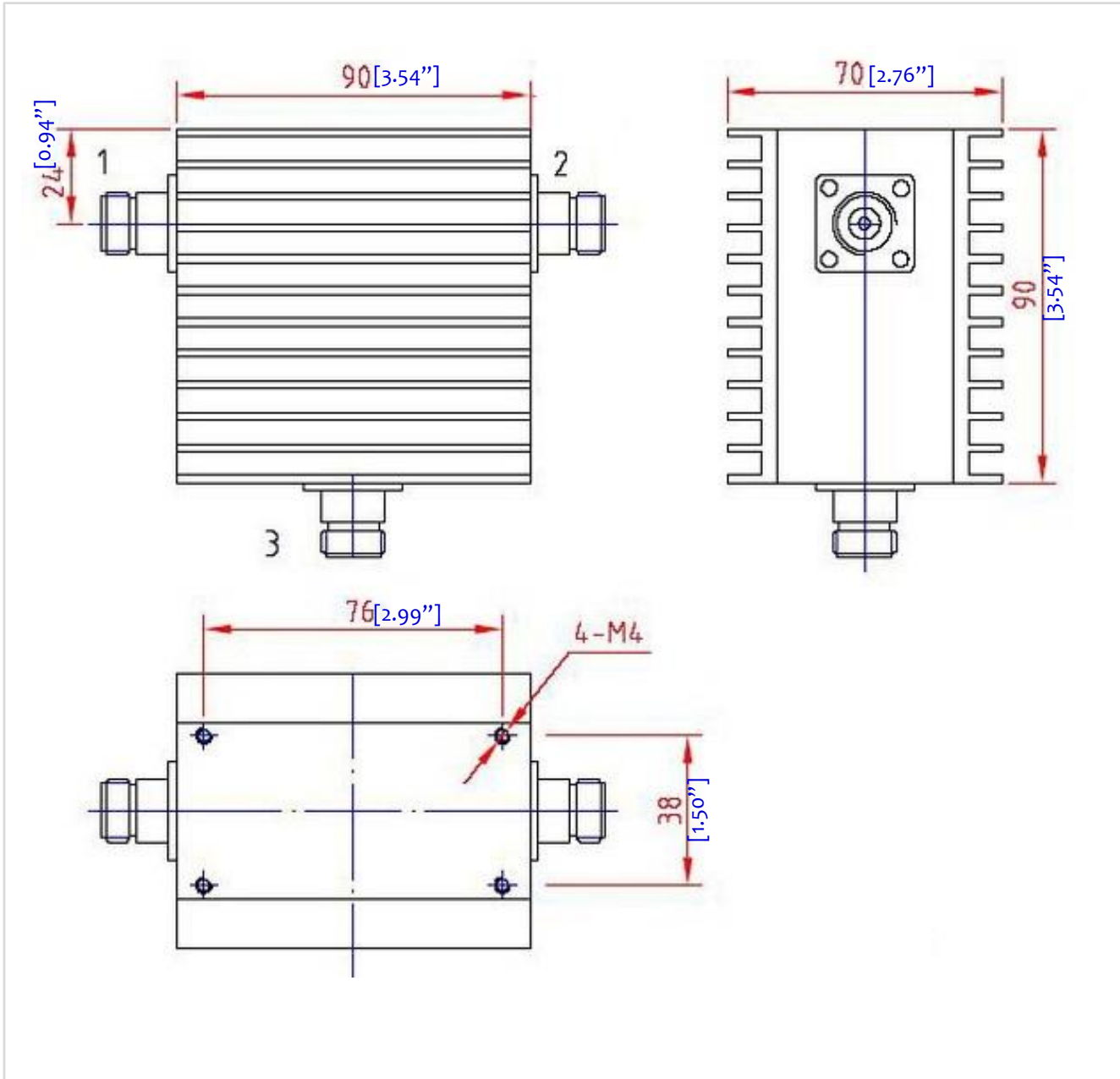
Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	805.0000 MHz	-30.11 dB	
2 ▾	S12	805.0000 MHz	-30.71 dB	
3 ▾	S21	805.0000 MHz	-0.23 dB	
4 ▾	S22	805.0000 MHz	-30.94 dB	
5 ▾	S33	805.0000 MHz	-32.53 dB	

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**Outline Drawing:**

All Dimensions in mm [inches]



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