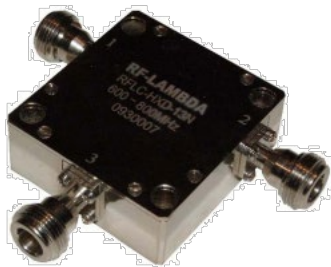


## Coaxial Circulator 75 – 90MHz



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

### Features

- High power handling up to 100W
- 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	75-90			MHz
Insertion Loss		0.8	0.9	dB
Isolation (Note 1)	20	21		dB
VSWR		1.2	1.25	:1
Forward Power (CW)			100	W
Rotation	Clockwise (Standard) Counter Clockwise (upon request)			
Input / Output Connectors	N-Female			
Finish	Nickel Plated			
Case Material	Aluminum / Copper			
Impedance	50			$\Omega$

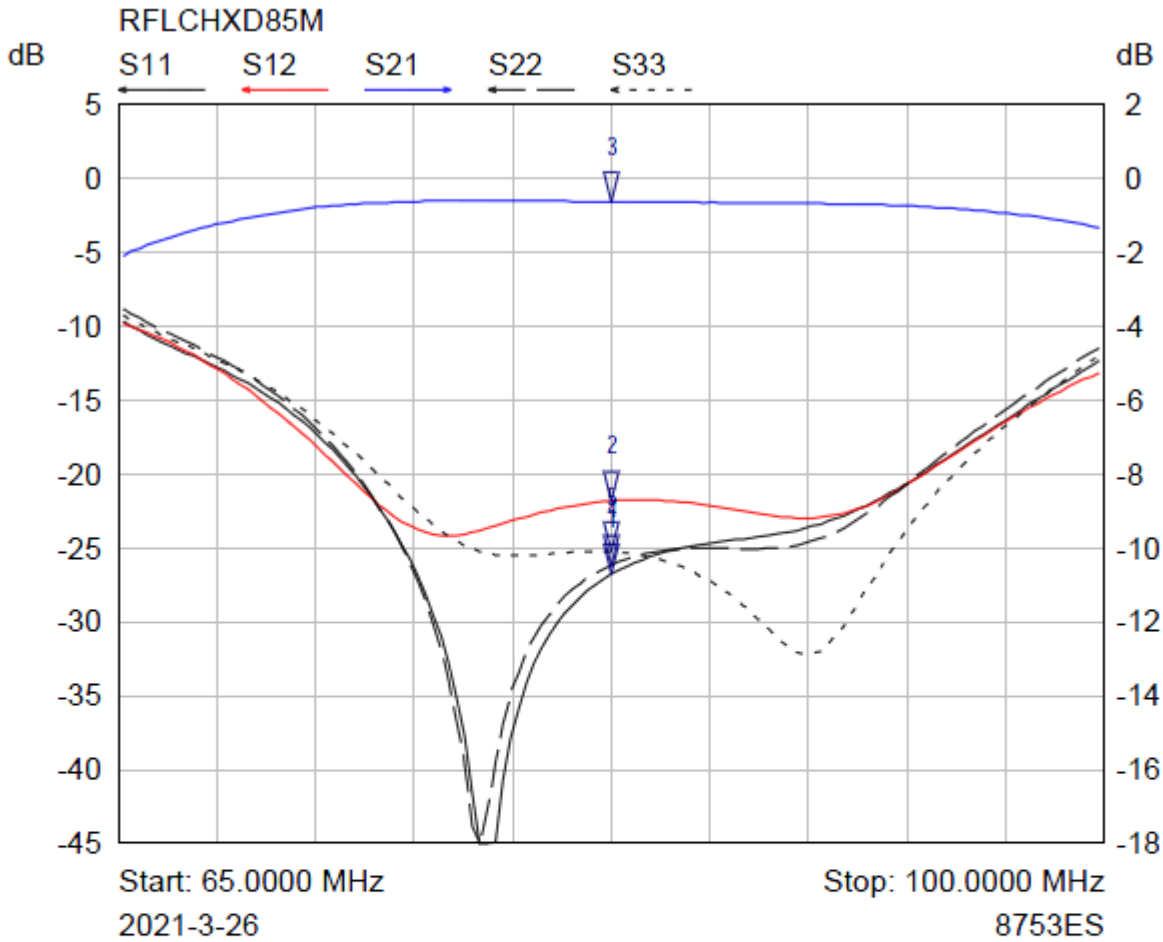
Note 1: Units which have a narrower frequency bandwidth can achieve higher isolation & lower insertion loss  
 Bandwidth (5 ~10) % x Center Frequency (Isolation >23dB)  
 Bandwidth (20~30) % x Center Frequency (Isolation >22dB)  
 Bandwidth (40~60) % x Center Frequency (Isolation >20dB)  
 Ask manufacturer for details

**Coaxial Circulator 75 – 90MHz**

*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

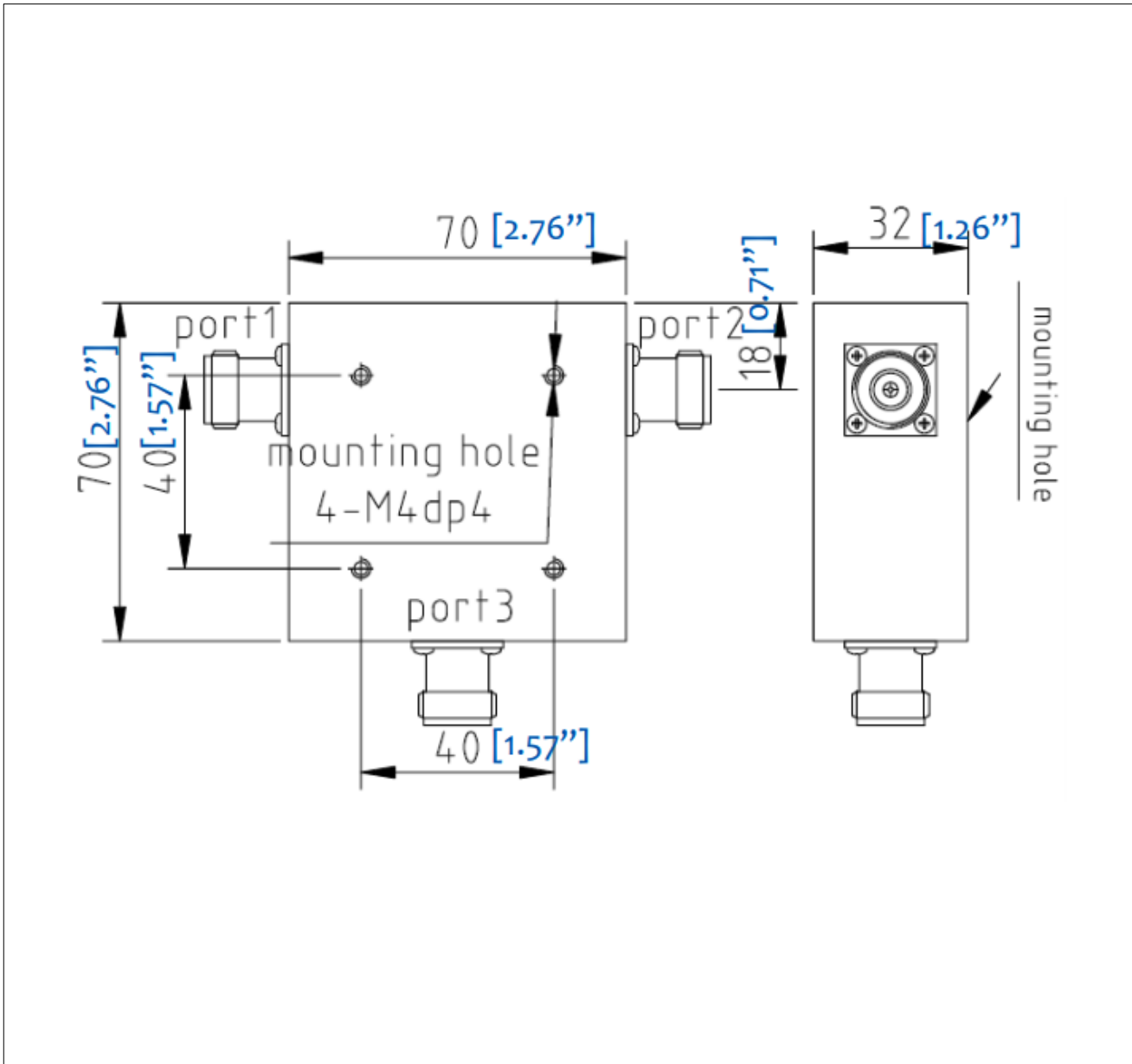


Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	82.5000 MHz	-26.77 dB	
2 ▾	S12	82.5000 MHz	-21.80 dB	
3 ▾	S21	82.5000 MHz	-0.62 dB	
4 ▾	S22	82.5000 MHz	-26.16 dB	
5 ▾	S33	82.5000 MHz	-25.24 dB	

SN;20210303

**Outline Drawing:**

All Dimensions in mm [inches]



**Coaxial Circulator 75 – 90MHz**

**Important Notice**

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