

UHF Dual Junction Circulator 865 - 868MHz



Note: Photo is for illustration only.
Please refer to the outline drawing

Product Description

RFLC-216-2-865M868M is a UHF Dual Junction Circulator with a frequency range of 865 to 868MHz.

The circulator has a typical isolation of 25dB. The maximum insertion loss is 1.0dB. The circulator has good isolation performance.

The circulator input and output connectors are SMA Female.

Features

- High power handling up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

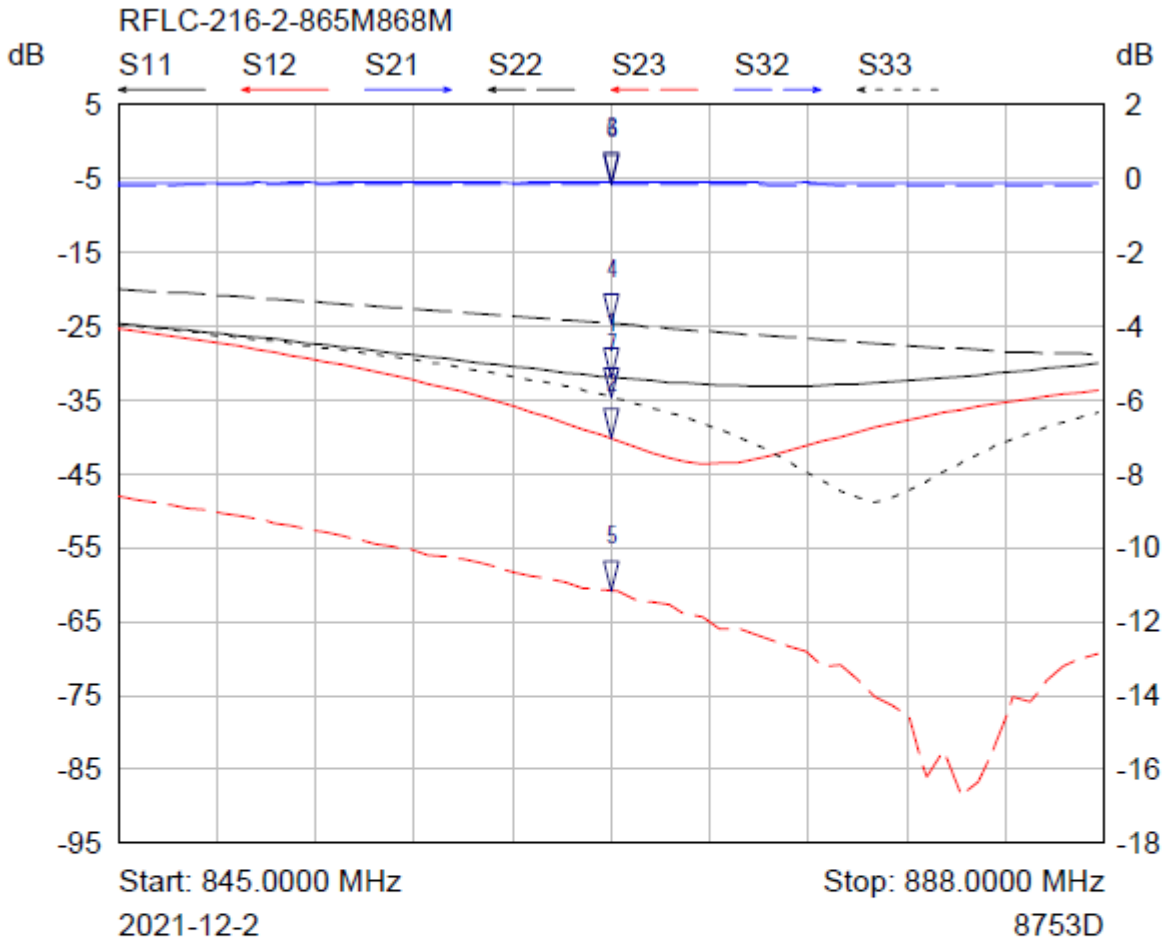
Electrical Specifications($T_A=25^\circ\text{C}$)

Parameter	Min	Typ	Max	Units
Frequency Range		865-868		MHz
Insertion Loss	Port 1 -> Port 2		0.5	dB
	Port 2 -> Port 3		1	dB
Isolation (Note 1)	Port 3 -> Port 2	50		dB
	Port 2 -> Port 1	25		dB
VSWR			1.25	:1
Power Handling (CW)			50	W
Reverse Power (CW)			20	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		SMA-Female		
Impedance		50		Ω
Case Material		Aluminum Alloy		

Environmental Specifications and Test Standards

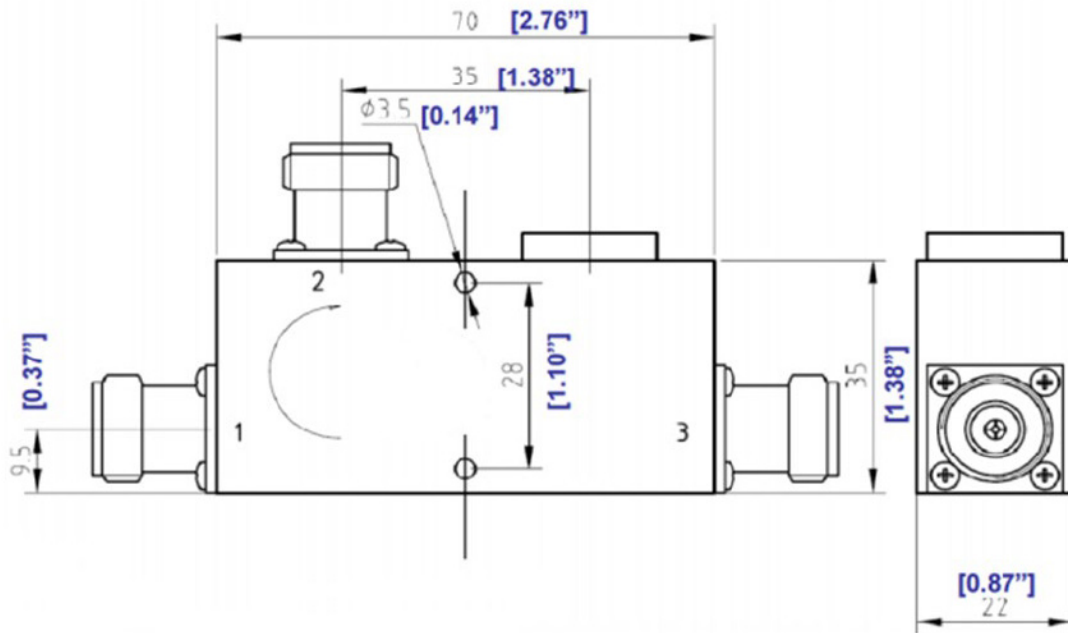
Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +125°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, 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



SN:20211201

Outline Drawing



Notes:

1. Package Material: Aluminum Alloy
2. Finish: Nickel
3. All dimensions are in millimeters [inches]

Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
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Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFLC-216-2-865M868M	SMA Female Connectors	865MHz-868MHz UHF Dual Junction Circulator

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