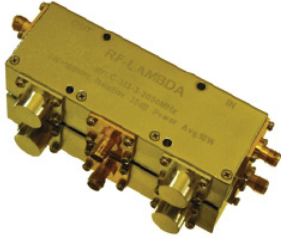


## Triple Junction Circulator 2.1-2.4GHz



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

### Product Description

RFLC313G21G24 is a triple junction circulator with a frequency range of 2.1 to 2.4GHz.

The circulator has a typical isolation of 45dB. The maximum insertion loss is 0.5dB.

The operating temperature of this product is within -40 to +85°C

### Features

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

### 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

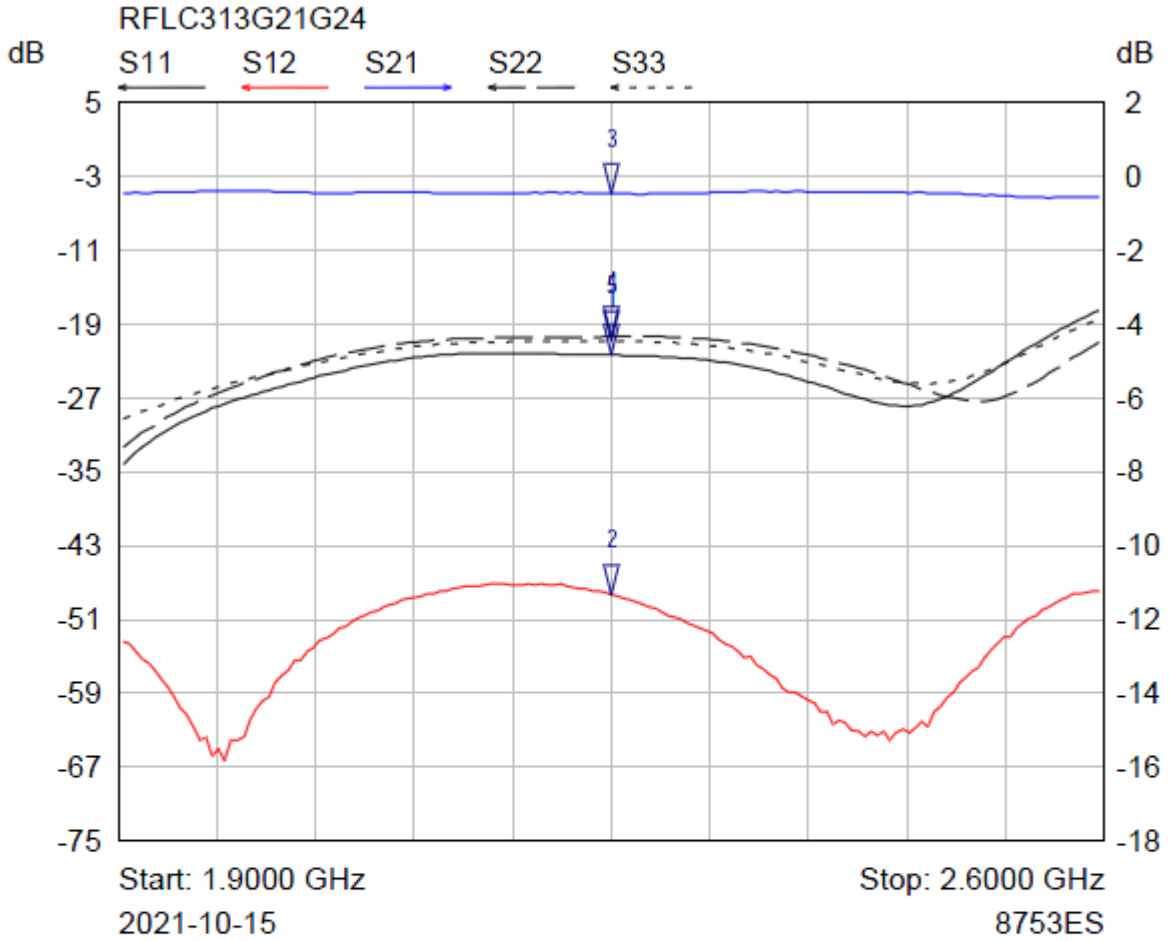
### Electrical Specifications( $T_A=25^\circ\text{C}$ )

Parameter	Min	Typ	Max	Units
Frequency Range		2.1 – 2.4		GHz
Insertion Loss			0.5	dB
Isolation	45			dB
VSWR			1.25	:1
Forward Power (CW)			10	W
Reverse Power (CW)			1	W
Rotation		Clockwise (Standard) Counter Clockwise (Upon Request)		
Input / Output Connectors		SMA or N		
Impedance		50		$\Omega$

**Environmental Specifications and Test Standards**

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-40°C to +100°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



Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	2.2500 GHz	-22.38 dB	
2 ▾	S12	2.2500 GHz	-48.39 dB	
3 ▾	S21	2.2500 GHz	-0.47 dB	
4 ▾	S22	2.2500 GHz	-20.38 dB	
5 ▾	S33	2.2500 GHz	-20.84 dB	

SN:211004



**Ordering Information**

Part Number	Modification	Description
RFLC313G21G24	SMA or N Connectors	2.1GHz-2.4GHz Triple Junction Circulator

**Important Notice**

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