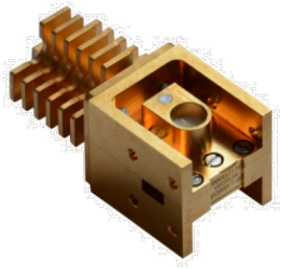
WR430 Waveguide Isolator 2.018GHz-2.232GHz



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

Product Description

RFWI430A-2018M2232M is a waveguide isolator with a frequency range of 2.018 to 2.232GHz.

The isolator has a typical isolation of 21dB. The maximum insertion loss is 0.3dB.

The isolator interface is WR430.

Features

- High power handling up to 800W
- Wide band operation
- High isolation within operational band
- Low Insertion Loss
- Stable performance over temperature
- High peak to average handling capability
- All specifications can be modified upon request

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=+25ºC)

Parameter	Min.	Typ.	Max.	Units
Frequency Range		2.018 – 2.232		GHz
Insertion Loss			0.30	dB
Isolation	21			dB
VSWR			1.2	: 1
Forward Power			800	W
Reverse Power			250	W
Rotation		Clockwise (Standard) Counter Clockwise (upon request)		
Interface		WR430		
Weight		-		lbs

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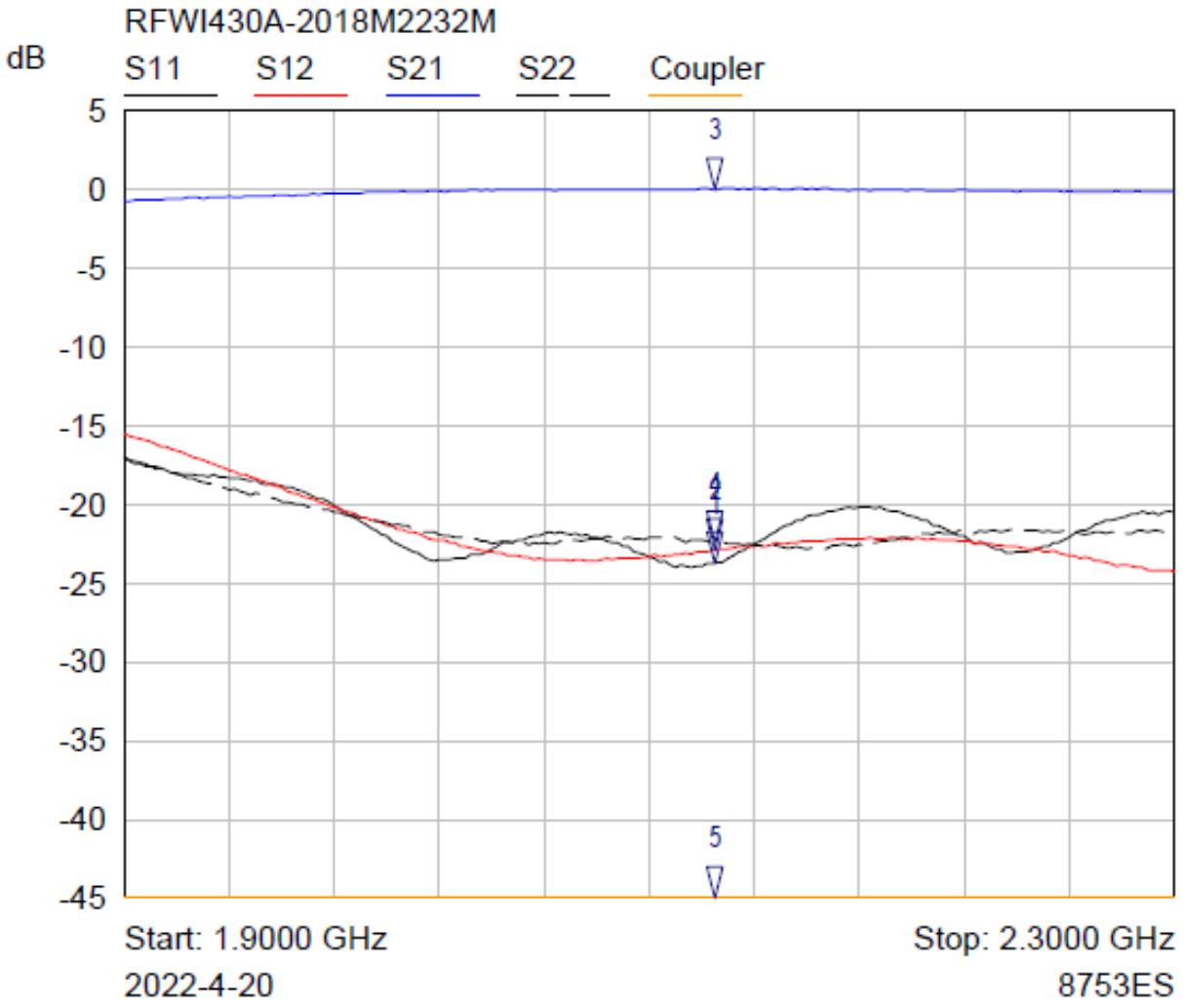
Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-20ºC to +70ºC (Case Temperature)
Storage Temperature	-40ºC to +85ºC
Thermal Shock	-20ºC → +70ºC (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)

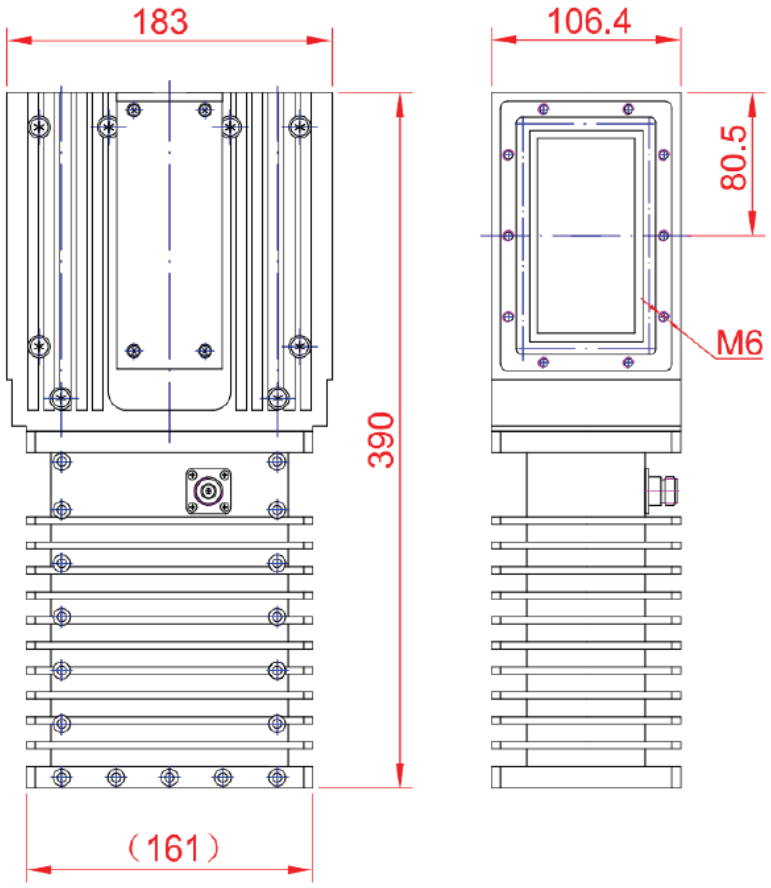
**For vibration testing details please see additional information section.

Typical Performance Plots



Mkr	Trace	X-Axis	Value	Notes
1 ▽	S11	2.1250 GHz	-23.73 dB	
2 ▽	S12	2.1250 GHz	-22.87 dB	
3 ▽	S21	2.1250 GHz	0.02 dB	
4 ▽	S22	2.1250 GHz	-22.41 dB	
5 ▽	Coupler	2.1250 GHz	-49.61 dB	

Outline Drawing



Notes:
1. Package Material: Aluminum Alloy
2. Finish : Conductive Oxidation
3. All dimensions are in millimeters [inches]
4. Outline Tolerances ±0.5 [0.02], Mounting Hole Tolerances ±0.2 [0.008] unless otherwise specified.

Additional Information

Documentation	Webpage
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

Ordering Information

Part Number	Modification	Description
RFWI430A-2018M2232M	WR430	2.018-2.232GHz Waveguide Isolator

Important Notice

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