

NuWaves

RF Solutions

NuFilter™ 08BPCV-2262.5-SFSF-M01 S-Band Bandpass Filter

2025 MHz to 2500 MHz

P/N: NW-FL-08BPCV-2262.5-SFSF-M01



NuWaves' NuFilter™ 08BPCV-2262.5-SFSF-M01 is the perfect companion to the NuPower Xtender™ SCISR-20 Tri-Band Bidirectional Amplifier operating in S-Band.

The NuFilter 08BPCV-2262.5-SFSF-M01 provides superior harmonic and noise filtering of SCISR Radio (S-Band), as demonstrated by the rejection levels of greater than 40 dB at 1850 and 2830 MHz. This high-performance module accepts input power levels up to 35W, with only a minimal 0.4 dB of insertion loss in the passband frequency range of 2025 to 2500 MHz.

With standard SMA connectors, the NuFilter can be quickly and easily added to any RF system. NuWaves' NuFilter™ removes the time and cost burden of creating a design, laying out a PCB, buying parts, assembling, and testing. Allow NuWaves to save you time and money by outsourcing your filtering needs.

Features

- Minimal Passband Insertion Loss
- 35W CW RF Power Handling
- Bandpass Filtering
- S-Band Operation
- Small Form Factor
- Lightweight
- Rugged Chassis

Applications

- SCISR Radio
- Amplifier Harmonic Filtering
- Military Communications
- Avionics
- Point-to-Point Communications
- Software Defined Radios (SDRs)
- RF Filtering
- Test and Measurement

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Specifications

Absolute Maximums

Parameter	Rating	Unit
Max RF Input Power, CW, $Z_L = 50 \Omega$	35	W
Max Operating Temperature	60	°C
Max Storage Temperature	85	°C

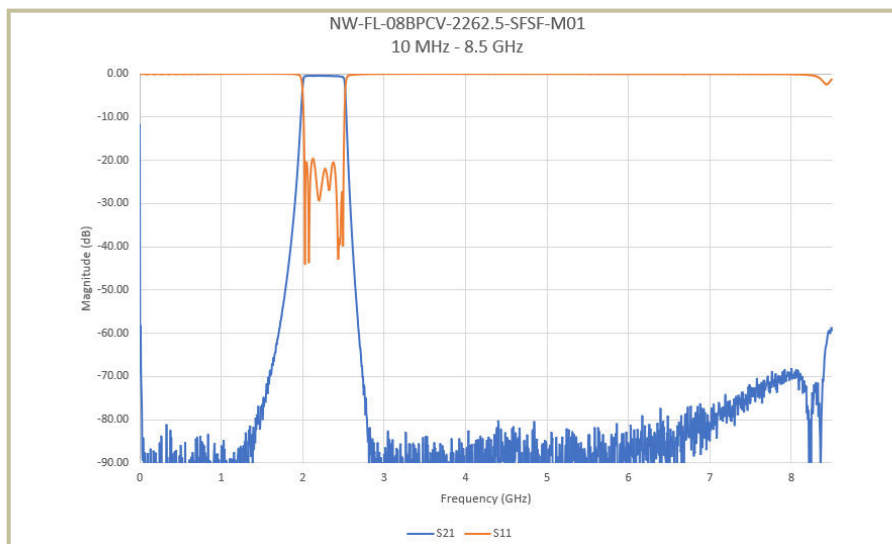
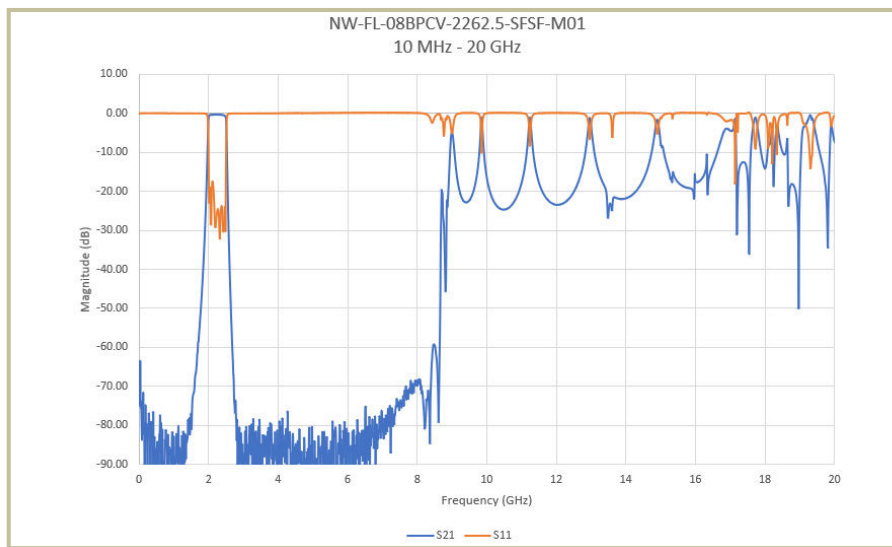
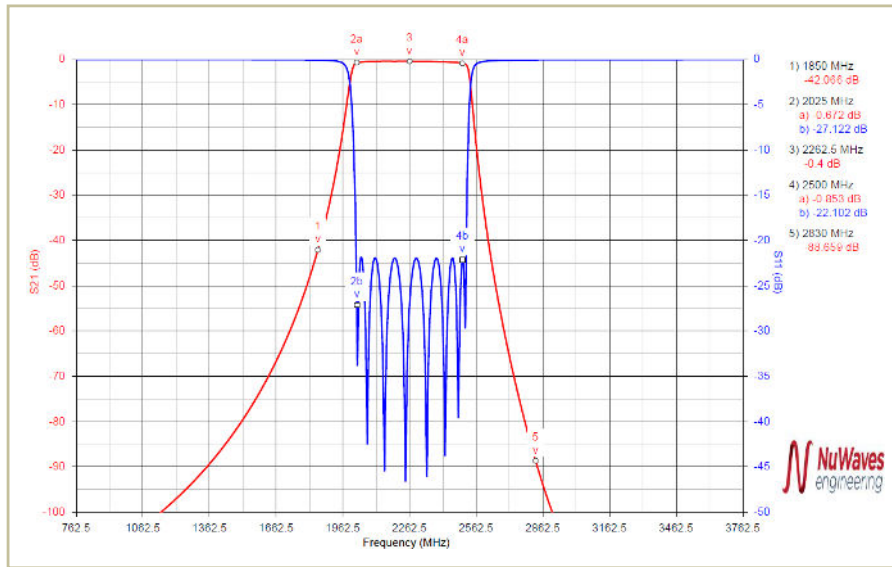
Export Classification
EAR99

Electrical Specifications @ 25 °C, $Z_S=Z_L=50 \Omega$

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Operating Frequency	BW	2025		2500	MHz	
Passband Insertion Loss	IL		0.7	1.1	dB	2025 MHz
			0.4	0.6		2262.5 MHz
			0.7	1.1		2500 MHz
Rejection			-40		dB	1850 MHz
			-40			2830 MHz
Passband Flatness			0.3	0.5	dB	
VSWR (within passband)	VSWR		1.5			

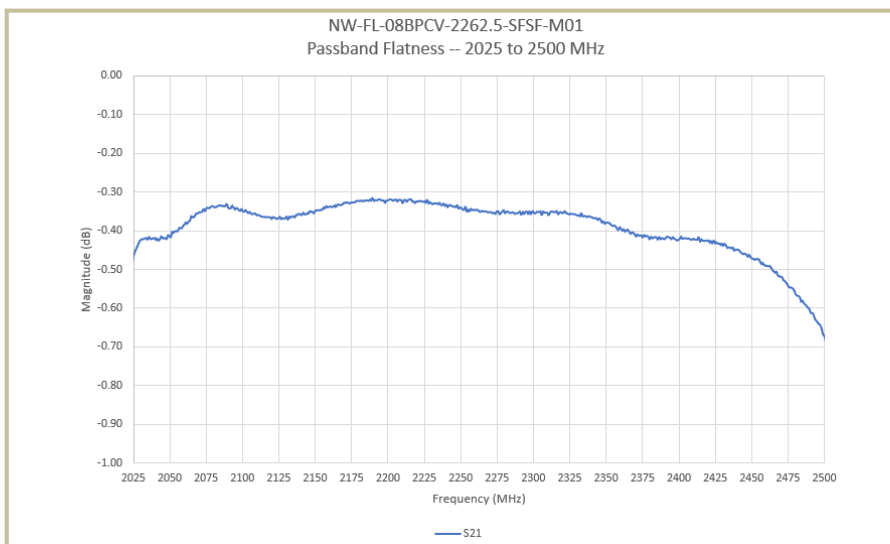
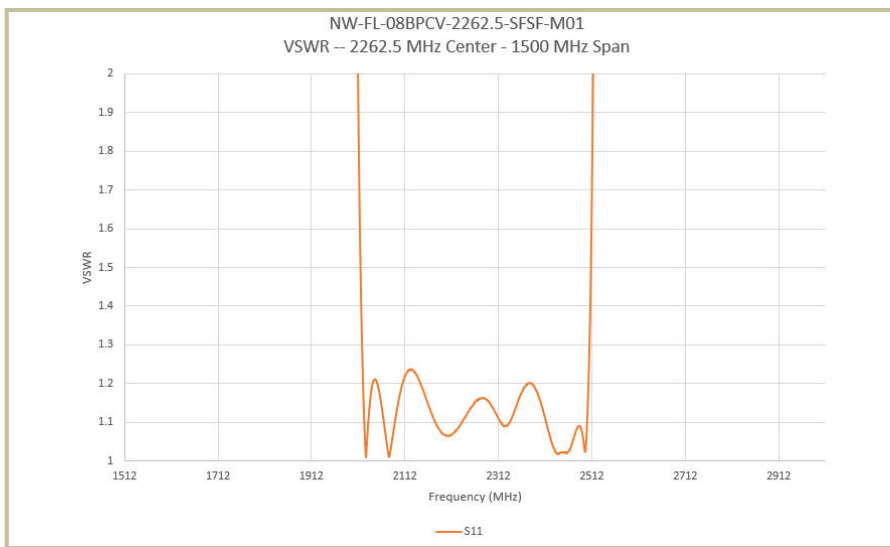
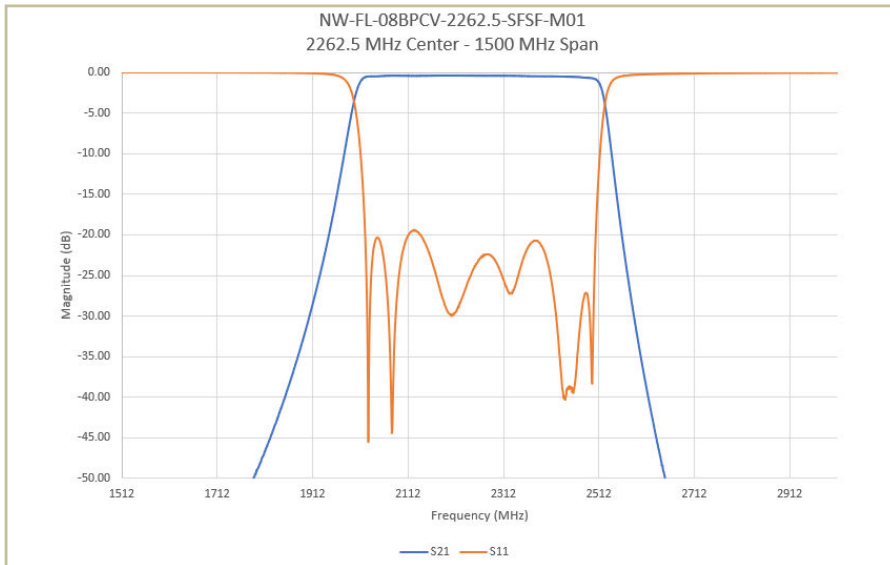
NuFilter™ 08BPCV-2262.5-SFSF-M01

Performance Plots



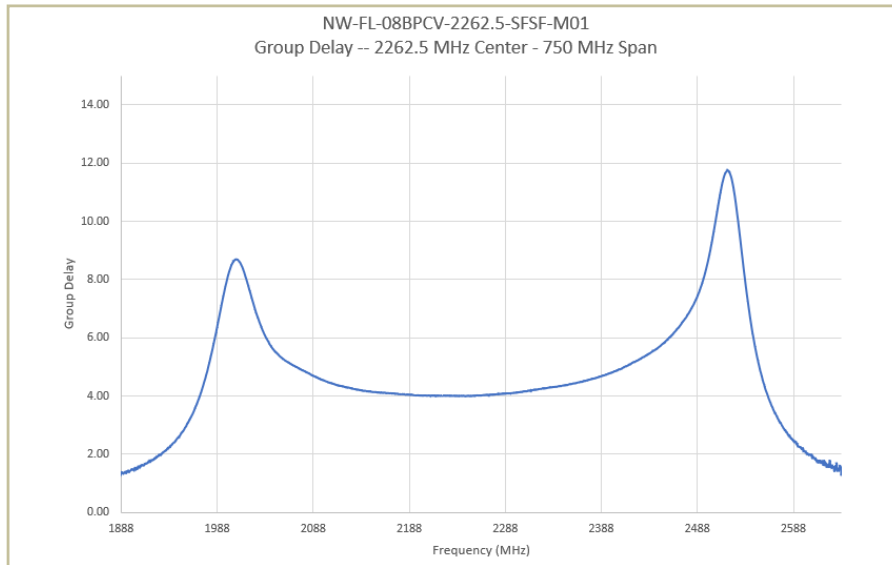
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Performance Plots (cont.)



NuFilter™ 08BPCV-2262.5-SFSF-M01

Performance Plots (cont.)

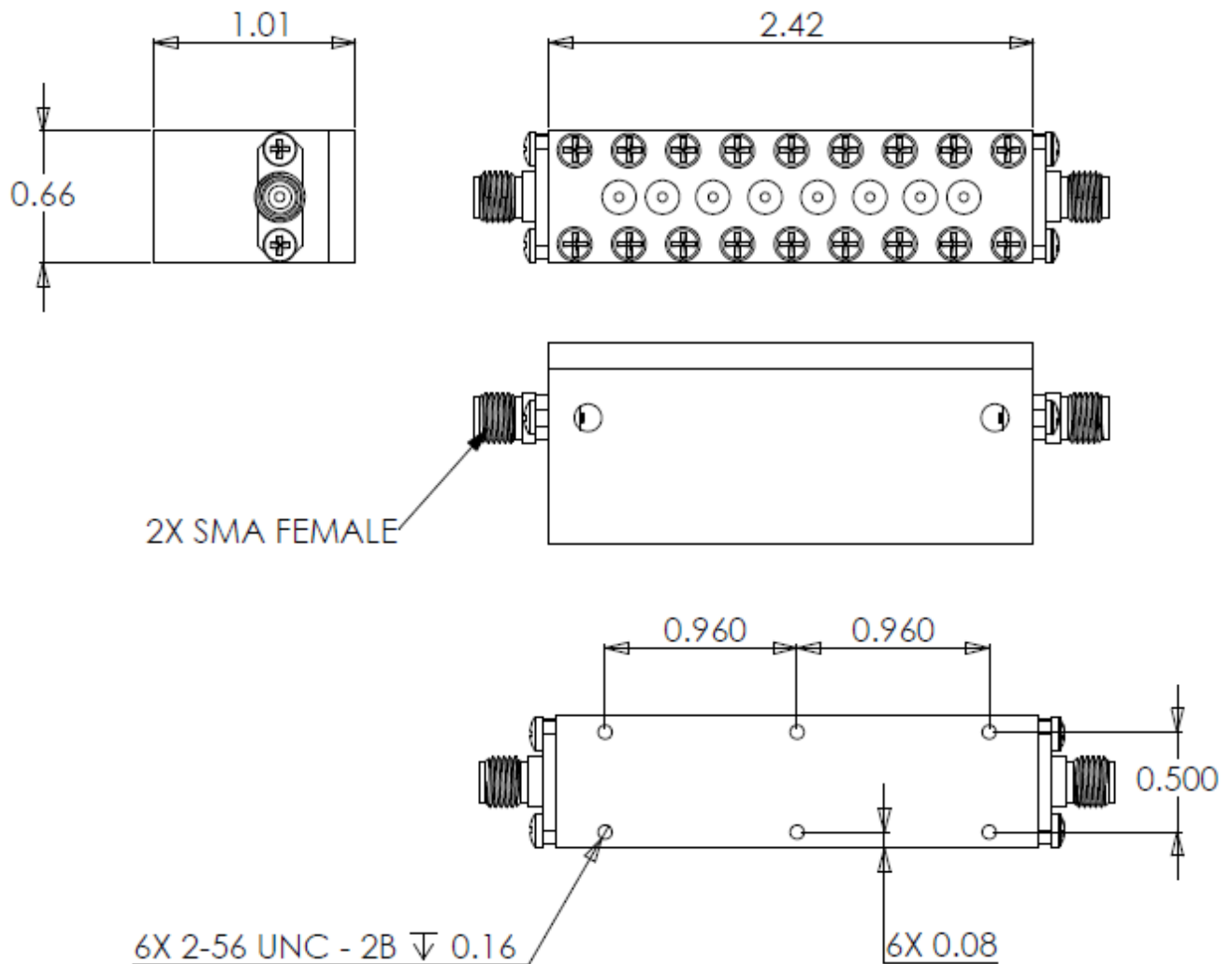


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Mechanical Specification

Parameter	Value	Unit	Limits
Dimensions	2.42 x 1.01 x 0.66	in	Max
Weight	TBD	oz	Max
RF Connectors, Input/Output	SMA Female		
Finish	Silver Plating		

Mechanical Outline



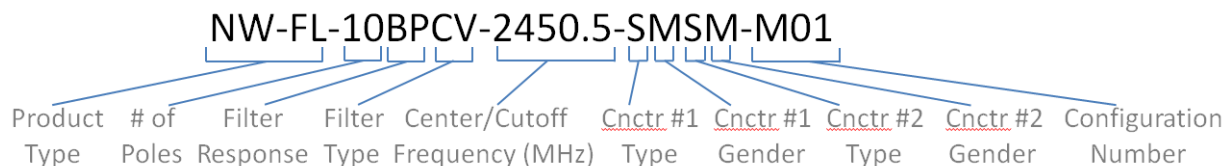
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Environmental Specifications

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	T _C	-40		+60	°C
Storage Temperature	T _{STG}	-40		+85	°C
Relative Humidity (non-condensing)	RH			95	%
Altitude MIL-STD-810F - Method 500.4	ALT			30,000	ft
Vibration / Shock Profile (Random profile in x,y, z axis, as per Figure for 15 minute duration in each axis)					

Part Numbering Format

Part Number Example:



Number of Poles: 01 to 12 (2 digits)

Connector Type: S (SMA)
 B (BNC)
 T (TNC)

Filter Response: BP (Bandpass)
 LP (Lowpass)
 HP (Highpass)
 BR (Band Reject-Notch)

Connector Gender: M (Male)
 F (Female)

Filter Type: CV (Cavity)
 LE Lumped Element
 SL (Stripline)

Configuration #: Mxx (defines additional
 mechanical & spec
 elements)

For information on product disposal (end-of-life), please refer to this document:
<https://nuwaves.com/wp-content/uploads/Product-Disposal-End-of-Life.pdf>

Contact NuWaves



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