NuWaves
RF Solutions

NuFilter™ 08BPCV-1600-SFSF-M01 L-Band Bandpass Filter

1350 MHz to 1850 MHz

P/N: NW-FL-08BPCV-1600-SFSF-M01

NuWaves' NuFilter™ 08BPCV-1600-SFSF-M01 is the perfect companion to the NuPower Xtender™ SCISR-20 Tri-Band Bidirectional Amplifier's L-Band Channel.

The NuFilter 08BPCV-1600-SFSF-M01 provides superior harmonic and noise filtering of SCISR Radio (L-Band), as demonstrated by the rejection levels of greater than 40 dB at 1175 and 2025 MHz. This high-performance module accepts input power levels up to 35W, with only a minimal 0.6 dB of insertion loss in the passband frequency range of 1350 to 1850 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
- L-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

132 Edison Drive, Middletown, OH 45044 | 513.360.0800 | sales@nuwaves.com | www.nuwaves.com

NuFilter™ 08BPCV-1600-SFSF-M01

Specifications

Absolute Maximums

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

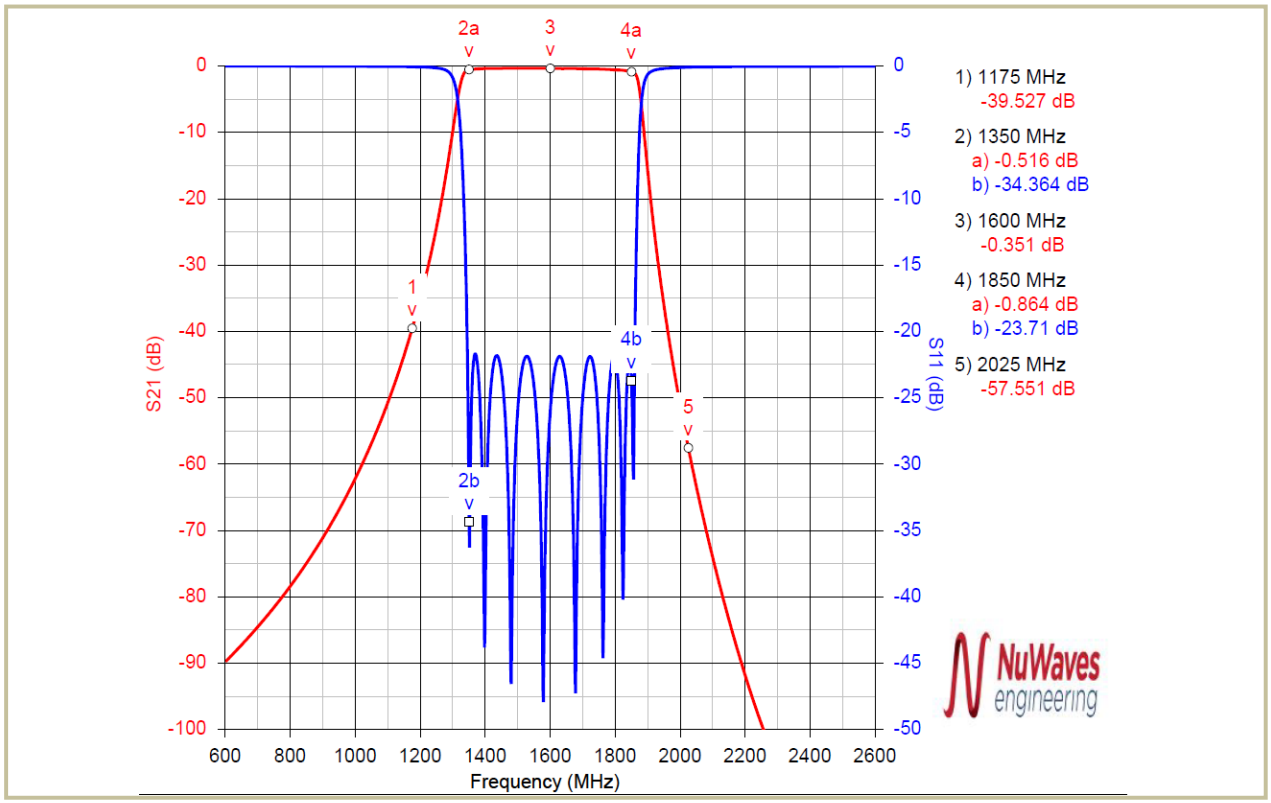
Export Classification
EAR99

Electrical Specifications @ 25 ℃, Z_S=Z_L=50 Ω

Parameter	Symbol	Min	Typ	Max	Unit	Condition
Operating Frequency	BW	1350		1850	MHz	
Passband Insertion Loss	IL		0.8	1.4	dB	1350 MHz
			0.4	0.6		1600 MHz
			0.8	1.4		1850 MHz
Rejection			-40		dB	1175 MHz
			-40			2025 MHz
Passband Flatness			0.4	0.8	dB	
VSWR (within passband)	VSWR		1.5			

NuFilter™ 08BPCV-1600-SFSF-M01

Performance Plots

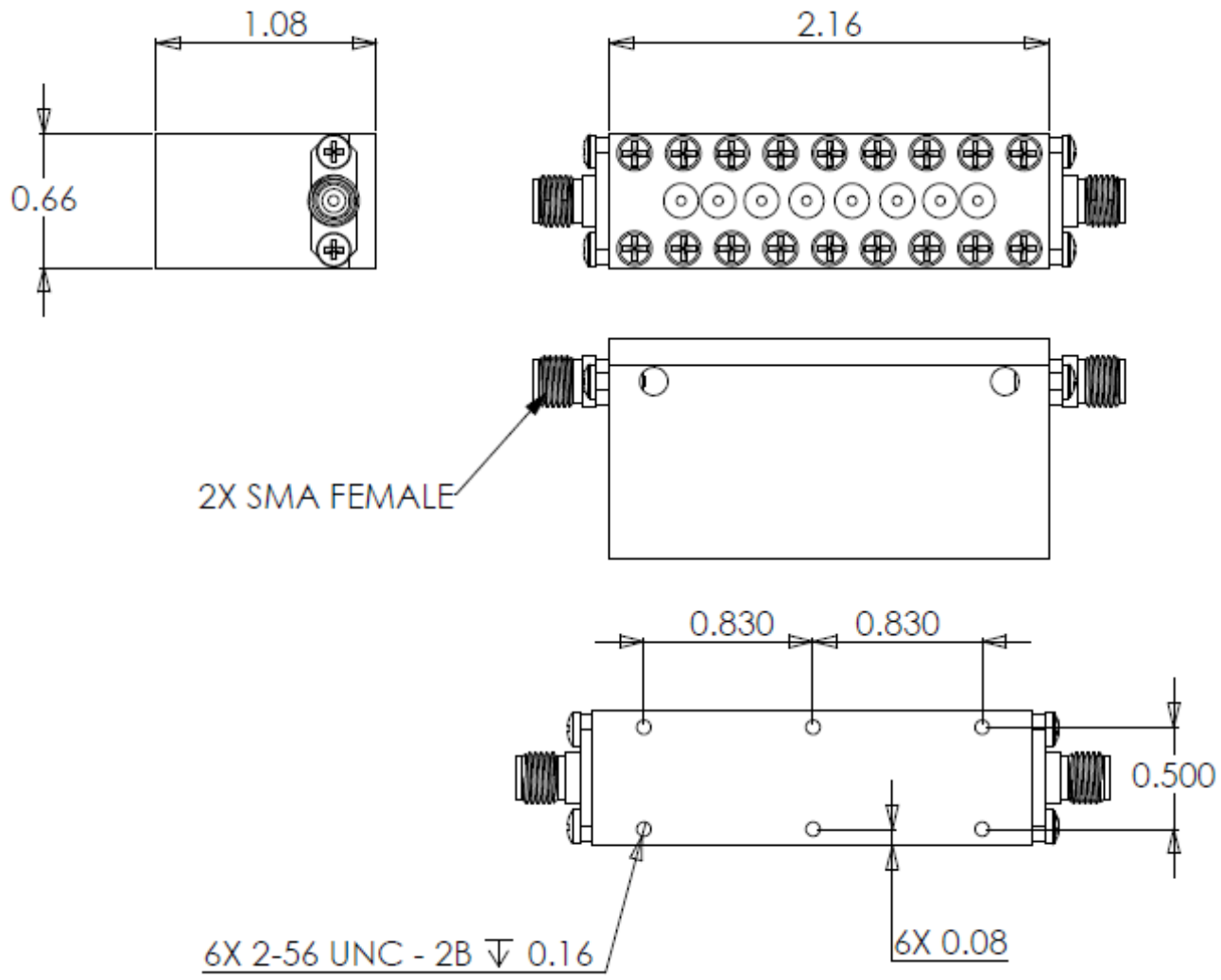


NuFilter™ 08BPCV-1600-SFSF-M01

Mechanical Specifications

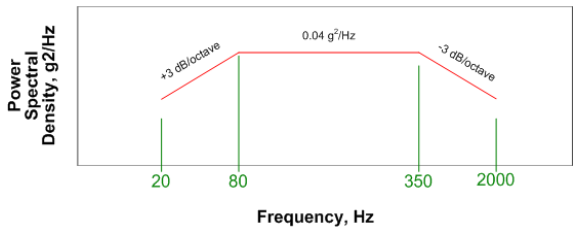
Parameter	Value	Unit	Limits
Dimensions	2.16 x 1.08 x 0.66	in	Max
Weight	TBD	oz	Max
RF Connectors, Input/Output	SMA Female		
Finish	Silver Plating		

Mechanical Outline



NuFilter™ 08BPCV-1600-SFSF-M01

Environmental Specifications

Parameter	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_C	-40		+60	℃
Storage Temperature	T_{STG}	-40		+85	℃
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:

NW-FL-10BPCV-2450.5-SMSM-M01

Product Type	# of Poles	Filter Response	Filter Type	Center/Cutoff Frequency (MHz)	Cnctr #1 Type	Cnctr #1 Gender	Cnctr #2 Type	Cnctr #2 Gender	Configuration Number
NW-FL-	10	B	PCV	2450.5	S	M	S	M	M01

Number of Poles: 01 to 12 (2 digits)

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

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

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

Connector Gender:
- M (Male)
- F (Female)

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

NuWaves RF Solutions
132 Edison Drive
Middletown, OH 45044

www.nuwaves.com
sales@nuwaves.com
513.360.0800

NuWaves RF Solutions