

Overview

Southwest Antennas Part # 1080-100 is a small, weatherproof bandpass filter designed to be installed in-line into a system when additional RF filtering is required to improve system performance. This product is ideal for tactical radio systems, fixed site infrastructure, or other communication networks that are operating in congested, high-interference RF environments. The ceramic bandpass filter is housed inside a rugged G10 fiberglass housing, with RF connectors on both ends of the product.

Part # 1080-100 features a band pass frequency range of 902 - 928 MHz and a very low <1.0 dBa insertion loss.

Southwest Antennas bandpass filters can be utilized to help eliminate interference from other co-located radios operating outside of the filter's 902 - 928 MHz operational frequency range, providing increased performance for radio systems and attached antennas.

Features:

- Stand-alone filter module with RF connectors
- <1.0 dBa Insertion loss
- 16 dB return loss
- 10W peak power handling
- Small size and lightweight design
- Can be quickly added to existing systems to help improve performance
- 902 - 928 MHz operational frequency range:
 - Federal law enforcement applications
 - DOD / military applications
 - Unlicensed ISM-band use
- RP-SMA(m) non-rotating and RP-SMA(f) RF connectors

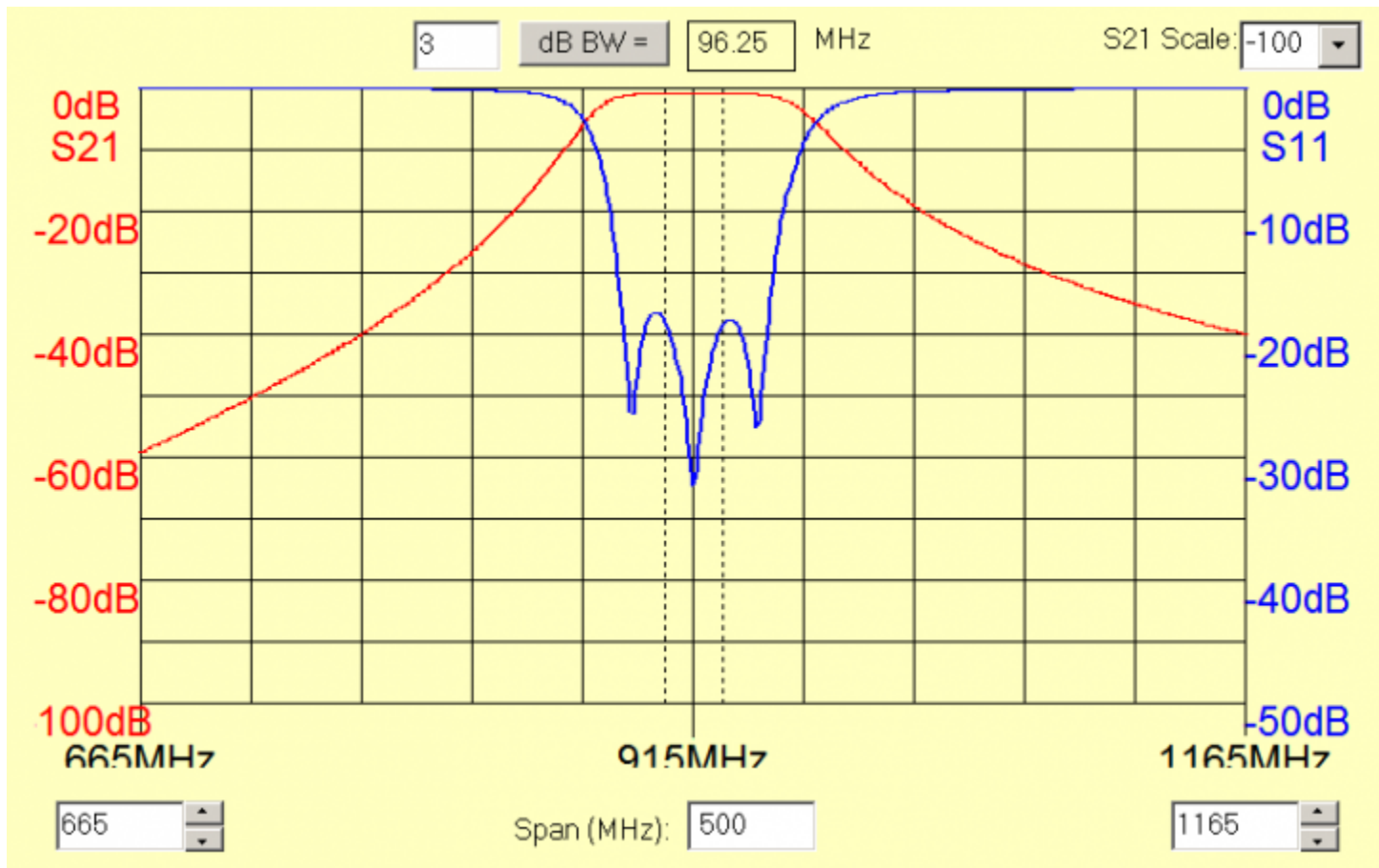


Applications:

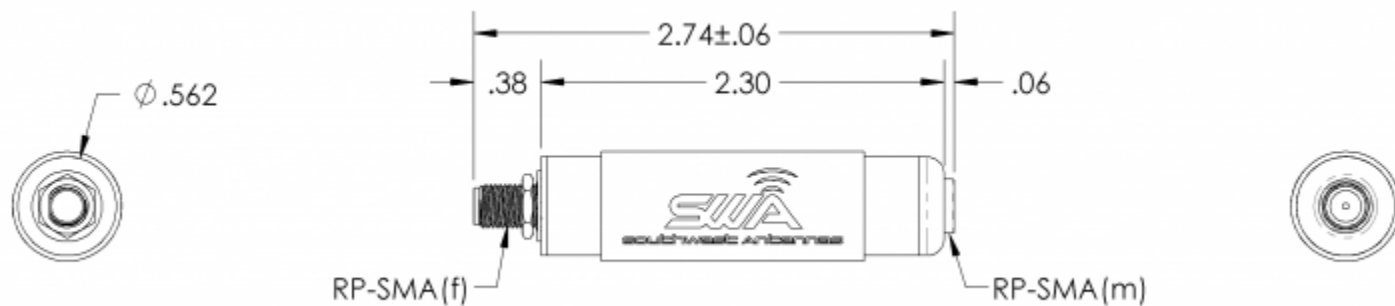
- Tactical radio systems
- Vehicle mounted radios
- Federal government radio systems
- DOD / military communication networks
- Surveillance systems and border security applications
- Fixed site communication infrastructure
- Unmanned aerial vehicles
- Unmanned ground vehicles
- Unlicensed ISM-band applications
- Low powered voice, data, and video communication

Filter Specifications

Parameter	Value	Units	Tolerance
Filter Type	3mm 3-Pole Bandpass Filter (ceramic)		
Filter Frequency Band	UHF Band		
Filter Impedance	50	Ohms	
Filter Min Frequency	0.902 / 902	GHz / MHz	
Filter Max Frequency	0.928 / 928	GHz / MHz	
Insertion Loss	<1.0	dBa	
Return Loss	16	dB	Over 100% of BW
Rejection 1	-6	dBc	Min @ 850 MHz
Rejection 2	-24	dBc	Min @ 800 MHz
Rejection 3	-50	dBc	Min @ 450 MHz
Rejection 4	-35	dBc	Min @ 1,227 MHz
Rejection 5	-50	dBc	Min @ 1,575 MHz
Filter Power CW	8	Watts	
Filter Power Peak	10	Watts	
Operating Temp	-40 to +85	C	
Product Length	2.74 / 69.60	inches / mm	±.06" (including RF connector length)
Product Diameter	0.56 / 14.27	inches / mm	
Product Weight	0.8 / 23.1	oz / grams	
RF Connectors	RP-SMA(m) Non-Rotating to RP-SMA(f)		



Filter Response Plot



Engineering Drawing

All dimensions are in inches