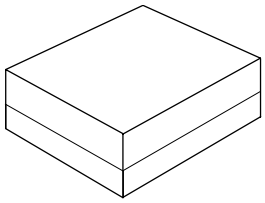
Preliminary

SF2216K

1603 MHz SAW Filter

- ***RF Filter Designed for Front End GLONASS Applications***
- ***Excellent Rejection***
- ***1.45 x 1.15 mm Surface-mount Case***
- ***Complies with Directive 2002/95/EC (RoHS)***



SM1411-5 Case

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage On any Non-ground Terminal	3	VDC
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Soldering Temerature Profile, 5 cycles/10 seconds maximum	265	°C

Electrical Characteristics

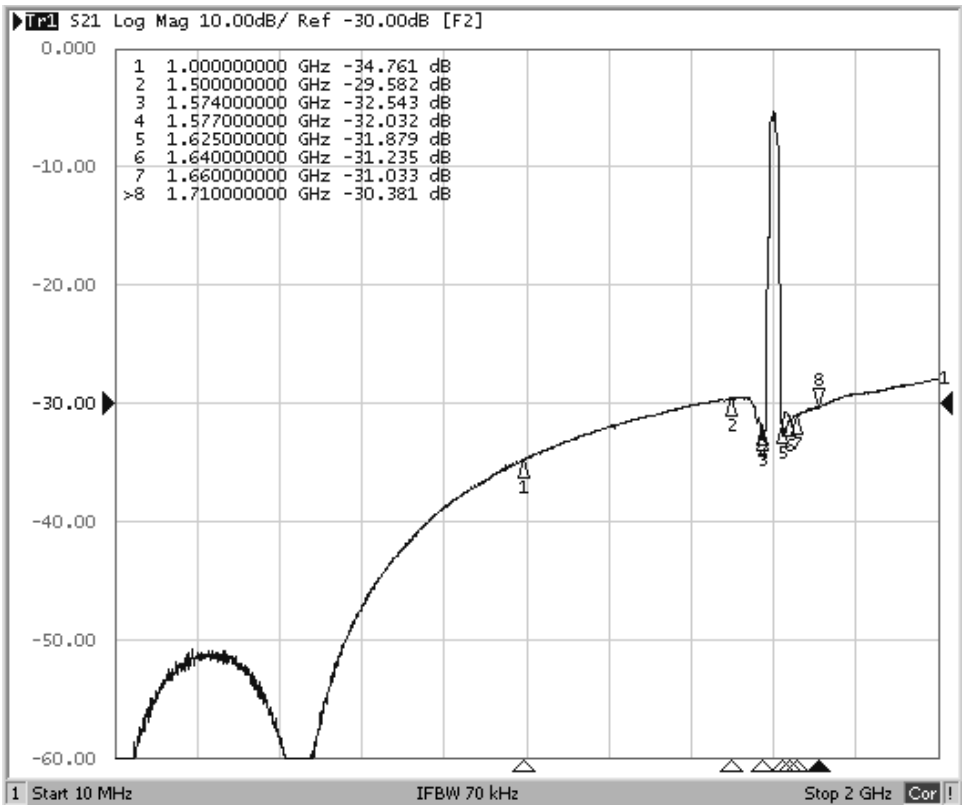
Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			1603		MHz
Insertion Loss, 1597 to 1609 MHz	IL_{MAX}			7.5	11.5	dB
Amplitude Ripple, 1597 to 1609 MHz				2.3	6.5	dB_{P-P}
Group Delay Ripple, 1597 to 1609 MHz				15	50	ns_{P-P}
Rejection Referenced to 0 dB:						dB
10 to 1000 MHz			28	34		
1000 to 1500 MHz			25	29		
1574 to 1577 MHz			20	31		
1625 to 1640 MHz			15	30		
1640 to 1660 MHz			25	30		
1710 to 2000 MHz			25	27		
VSWR, 1597 to 1609 MHz				1.8:1	2.3:1	
Terminating Source impedance	Z_S			50		Ω
Terminating Load impedance	Z_L			50		Ω
Case Style		SM1411-5				
Lid Symbolization ☐= year/month manufacturing code		A☐				

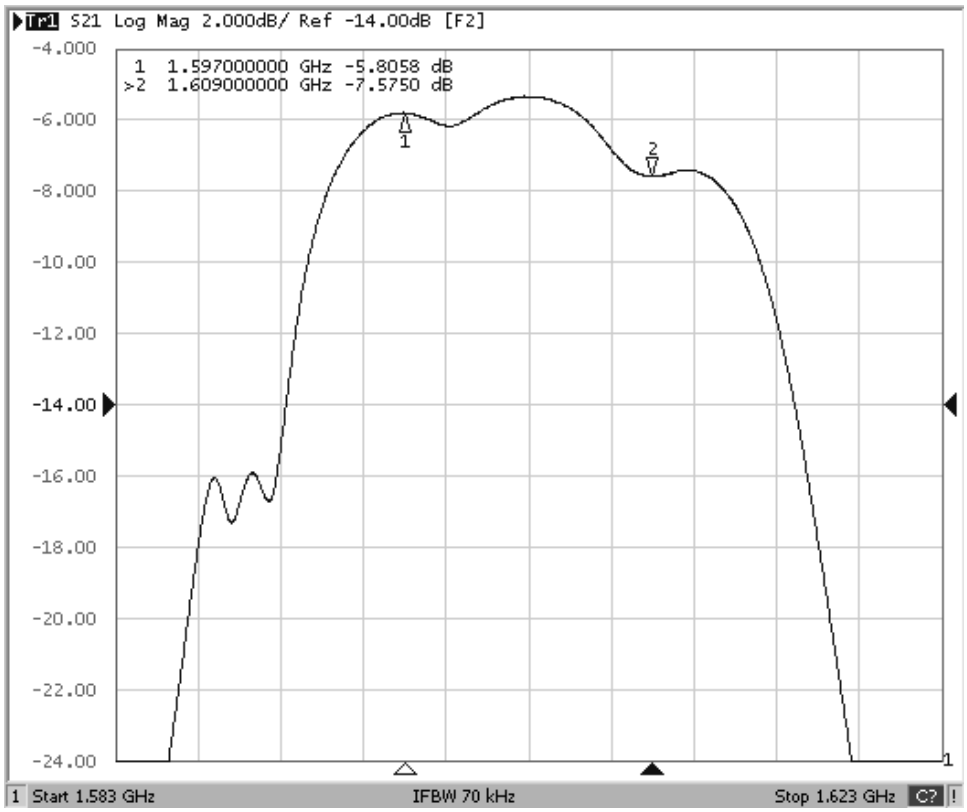
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

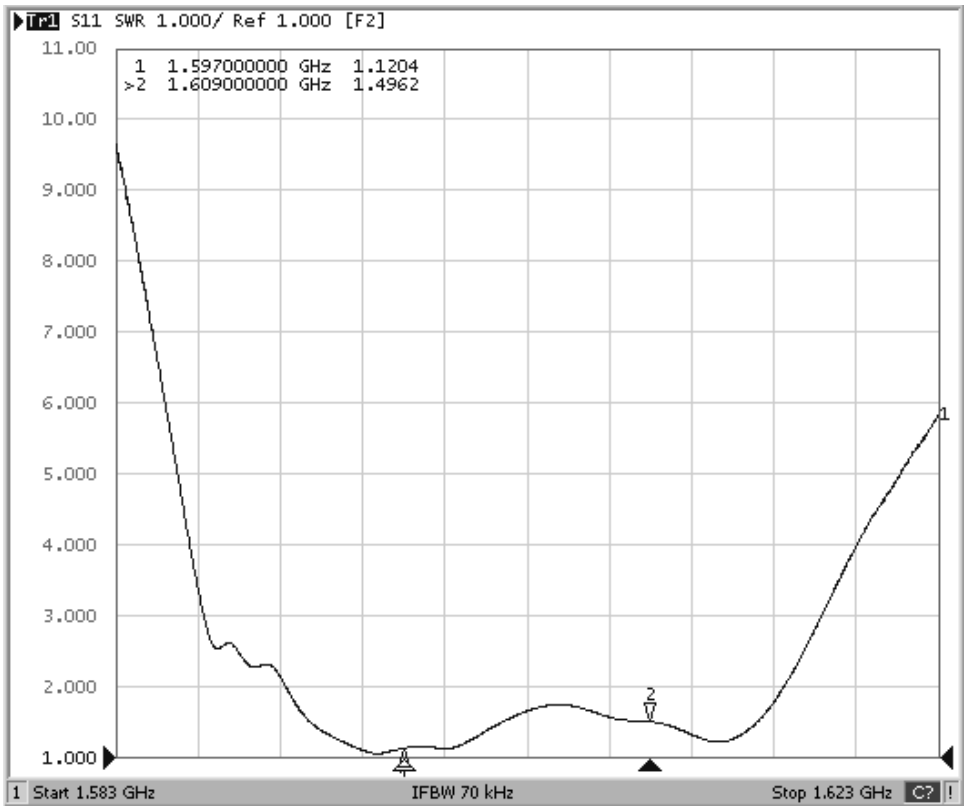
1. US and international patents may apply.
2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

Frequency Response Plots

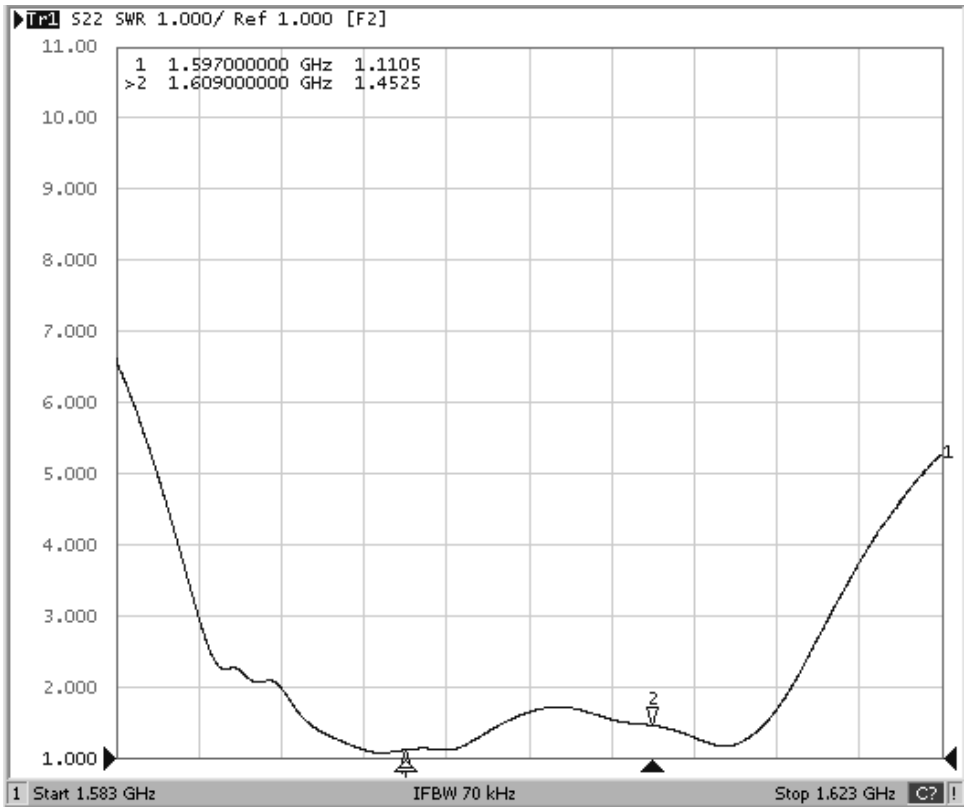




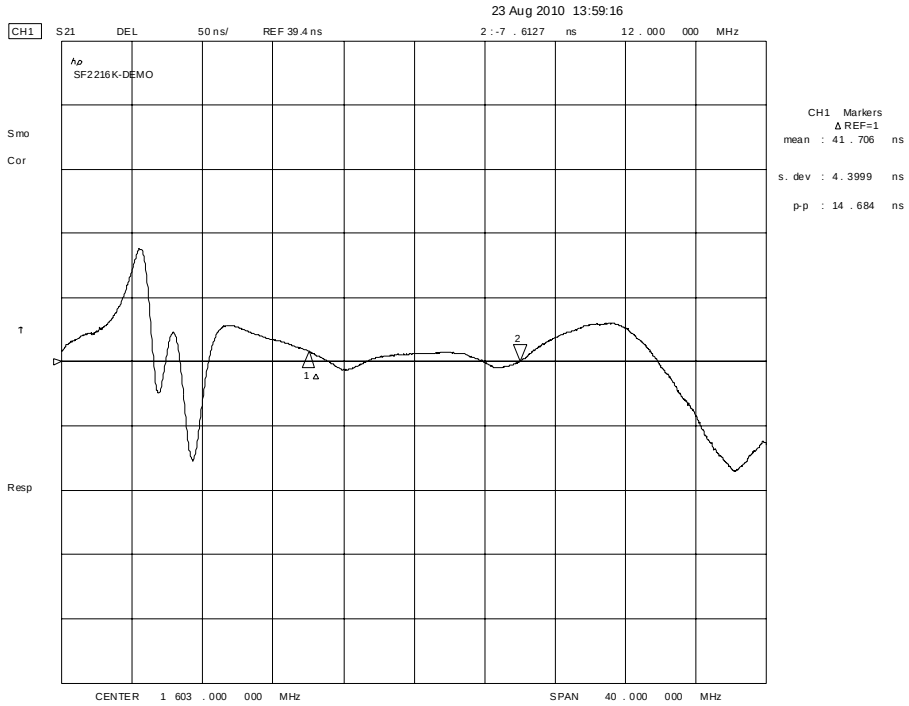
Input VSWR Plot



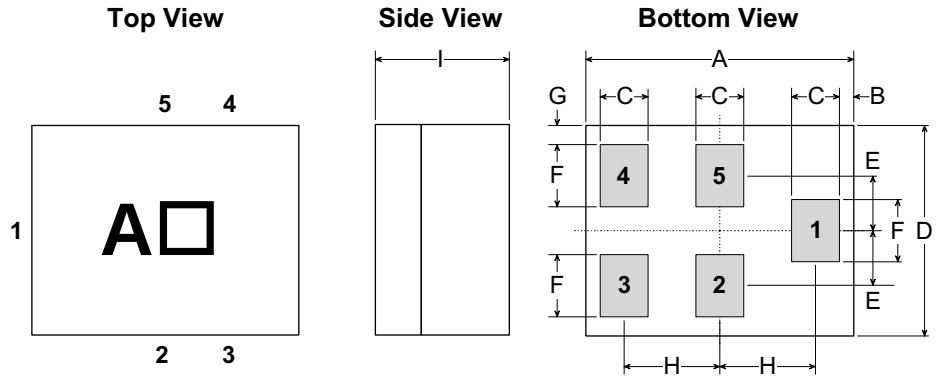
Output VSWR Plot

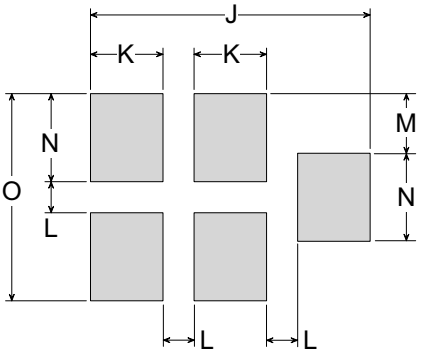


Group Delay Plot



SM1411-5 1.4 X 1.1 mm 5-Terminal Surface-mount Case Drawing





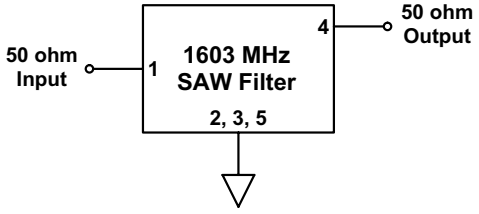
PCB Footprint

Case and PCB Footprint Dimensions

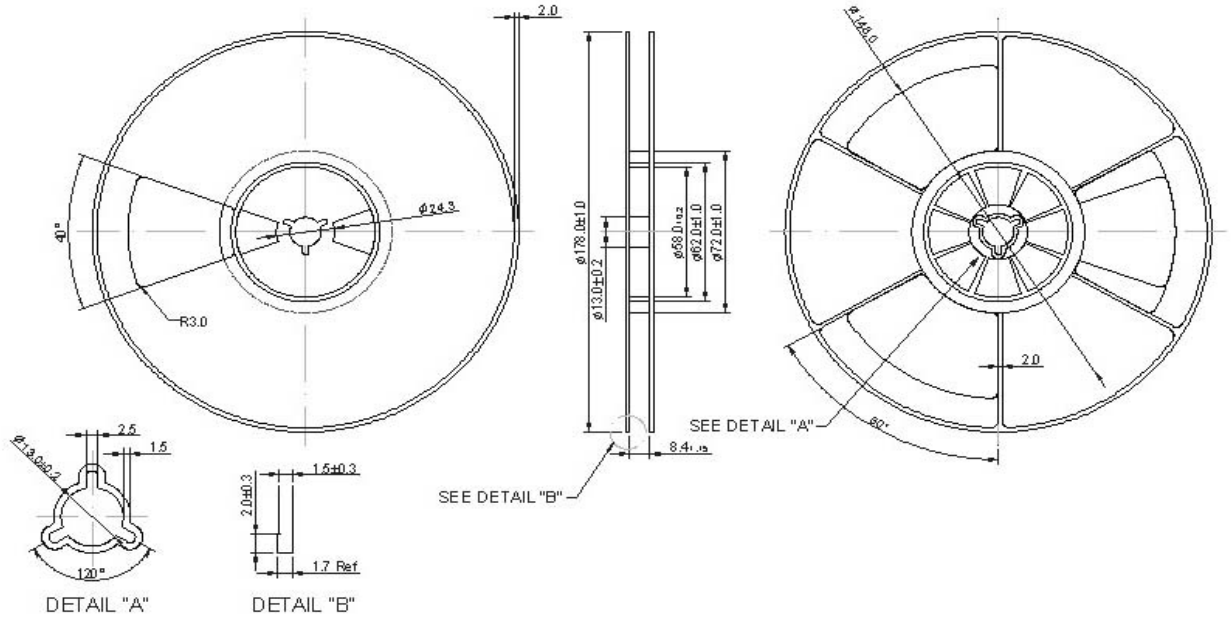
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.3500	1.4000	1.4500	0.0531	0.0551	0.0571
B	-	0.0750	-	-	0.0030	-
C	0.1700	0.250	0.3300	0.0067	0.0098	0.0130
D	1.0500	1.1000	1.1500	0.0413	0.0433	0.0453
E	-	0.2875	-	-	0.0113	-
F	0.2450	0.3250	0.4050	0.0096	0.0128	0.0159
G	-	0.100	-	-	0.0039	-
H	-	0.5000	-	-	0.0197	-
I	0.6000	0.6500	0.700	0.0236	0.0256	0.0276
J	-	1.3500	-	-	0.0531	-
K	-	0.3500	-	-	0.0138	-
L	-	0.1500	-	-	0.0059	-
M	-	0.2875	-	-	0.0113	-
N	-	0.4250	-	-	0.0167	-
0	-	1.0000	-	-	0.0394	-

Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

Test Circuit



Reel Dimensions - 7 inch Reel, 3000 Filters



Tape Dimensions