

Preliminary

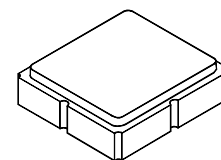


- Low-loss UHF SAW Filter
- 3.0 x 3.0 Surface-mount Package
- Complies with Directive 2002/95/EC (RoHS)



SF2249E

**1602 MHz
SAW Filter**



SM3030-8

Maximum Rating

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Solder Reflow Temperature, 10 seconds/5 cycles maximum	260	°C

Electrical Characteristics

Characteristic	Sym	Not	Min	Typ	Max	Units
Center Frequency	f_c			1602		MHz
3 dB Bandwidth	BW_3			61		
Insertion Loss, 1596 to 1607 MHz	IL			3.0	4.0	dB
Amplitude Ripple, 1596 to 1607 MHz				0.6	2.0	
Group Delay Ripple, 1596 to 1607 MHz				6	15	ns
Input/Output Return Loss, 1596 to 1607 MHz			8	9		dB
Attenuation, 0 dB Reference:						dB
10 to 1500 MHz			45	48		
1700 to 2400 MHz			43	50		
200 ohm Balanced Source Impedance				200 Ω 18 nH		
200 ohm Balanced Load Impedance				200 Ω 18 nH		

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint	
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	990, YWWS	
Standard Reel Quantity	Reel Size 7 inch	500 Pieces/Reel
	Reel Size 13 inch	3000 Pieces/Reel

Electrical Connections

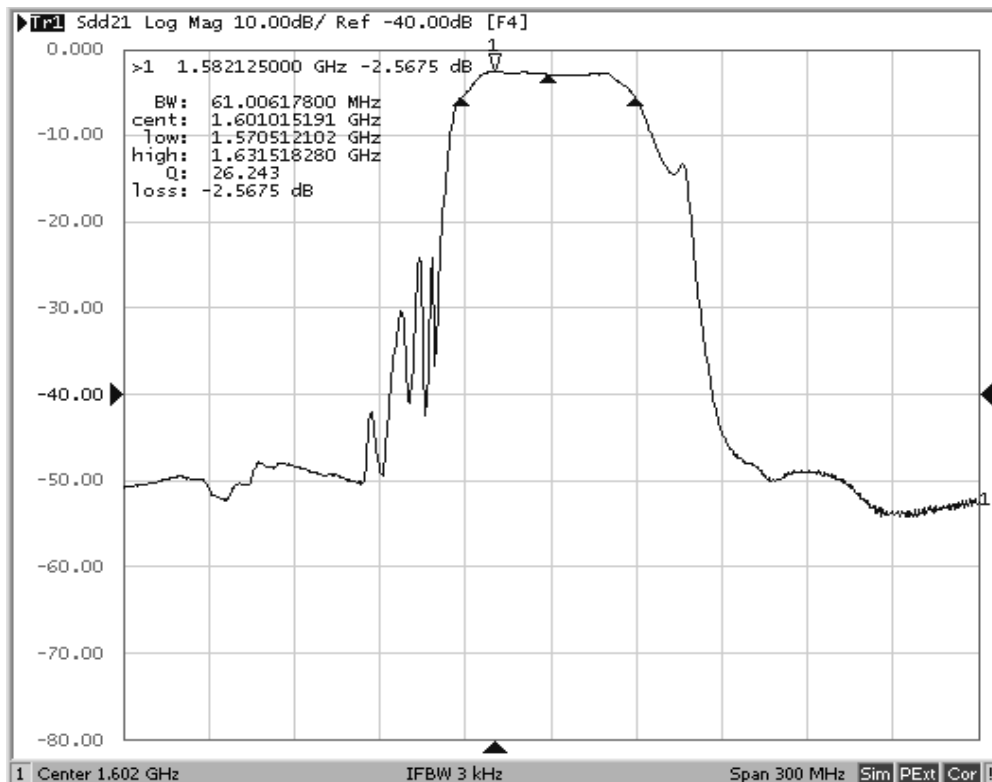
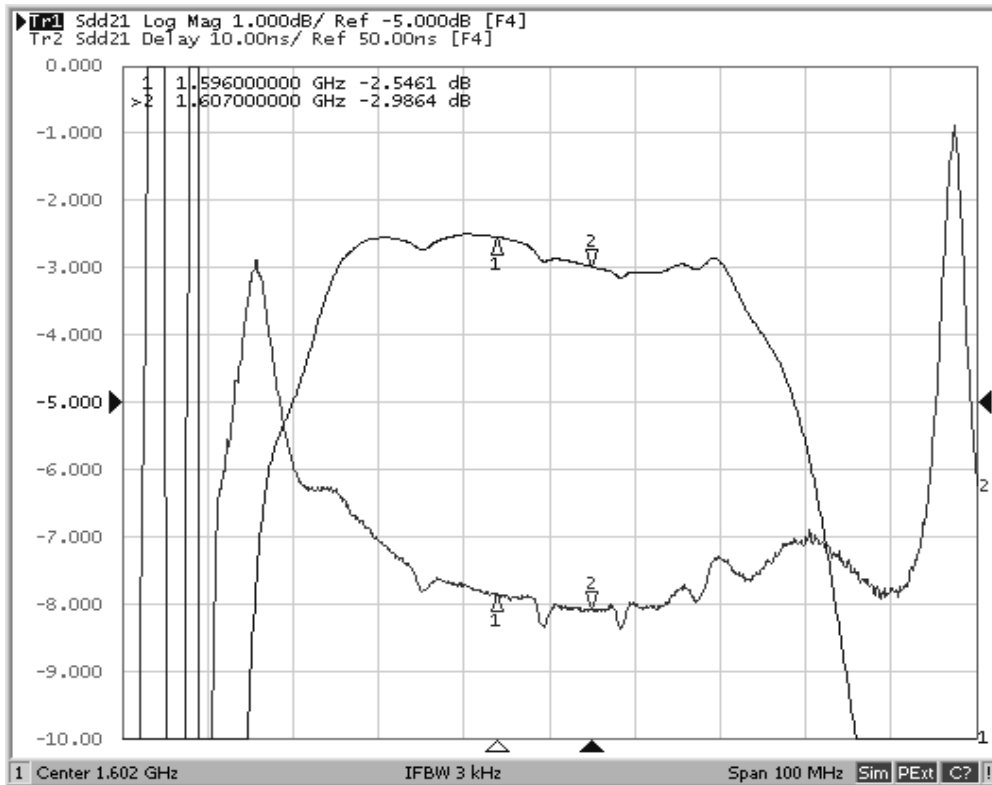
Connection	Terminals
Input	1, 2
Balanced Output	5, 6
Case Ground	All others

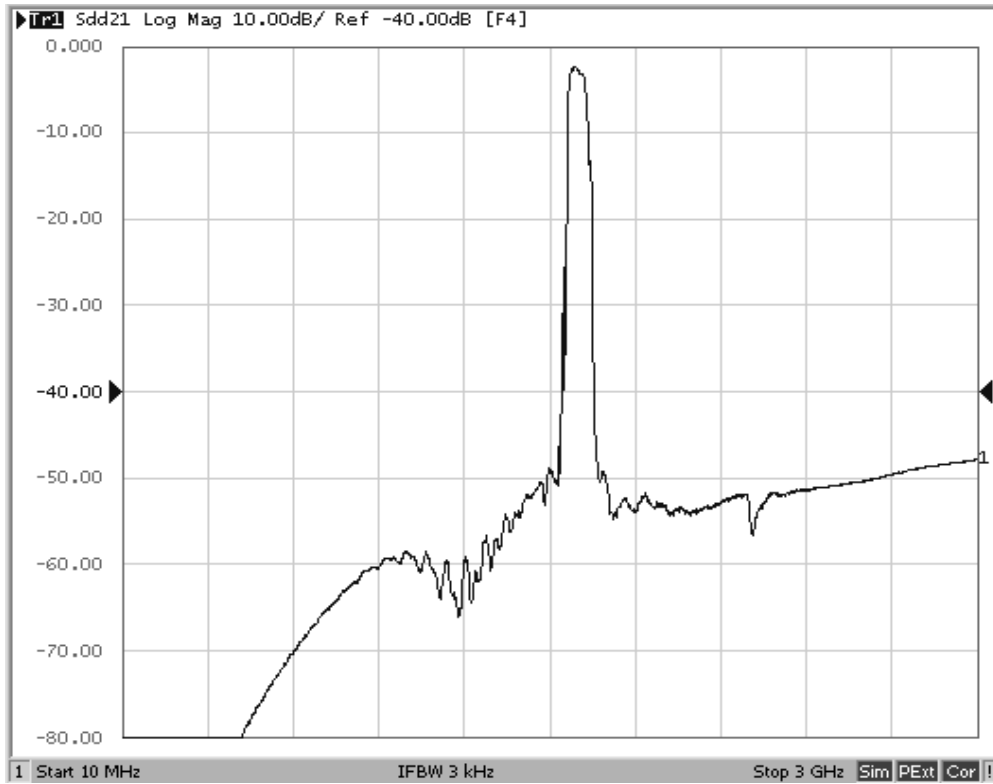


Notes:

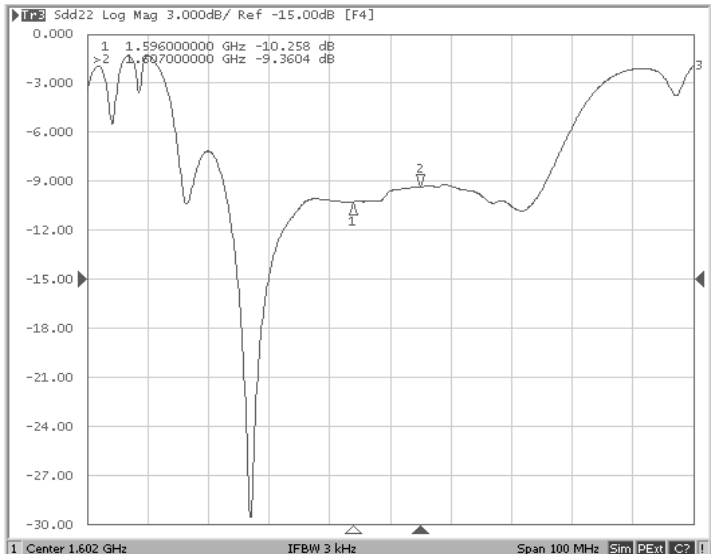
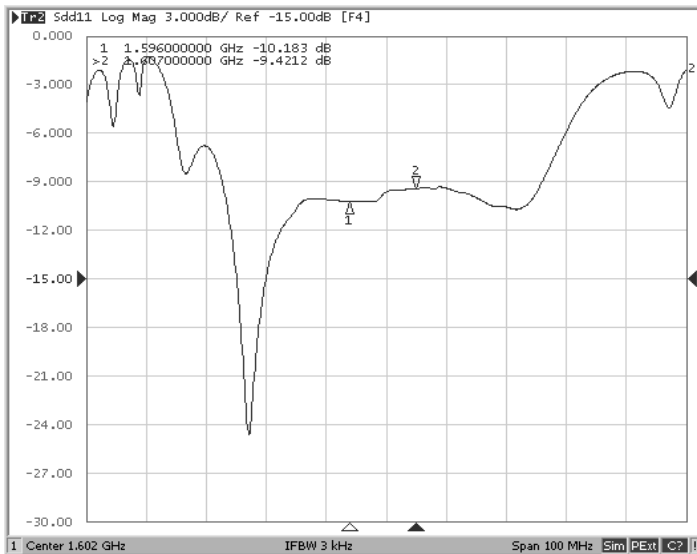
1. US and international patents may apply.
2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
3. Electrostatic Sensitive Device. Observe precautions for handling.

Filter Response Plots

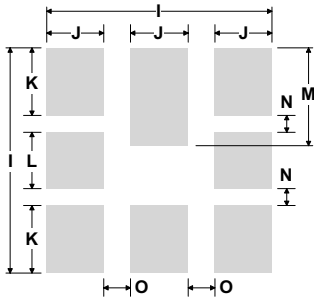
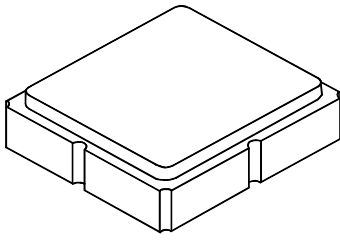




Input/Output Return Loss Plots



8-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



PCB Footprint Top View

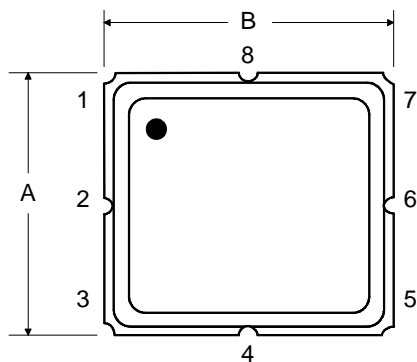
Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	-	-	1.10	-	-	0.043
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052
I		3.19			0.126	
J		0.81			0.032	
K		0.96			0.038	
L		0.81			0.032	
M		1.39			0.055	
N		0.23			0.009	
O		0.38			0.015	

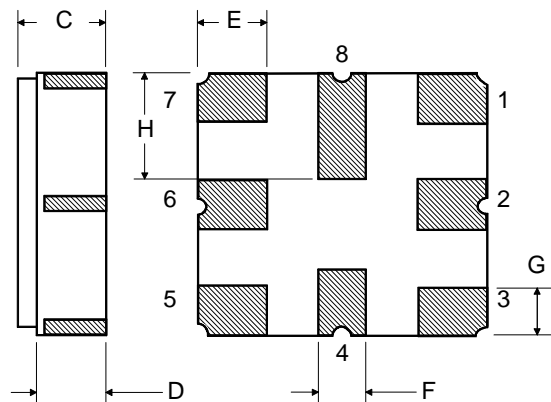
Case Materials

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

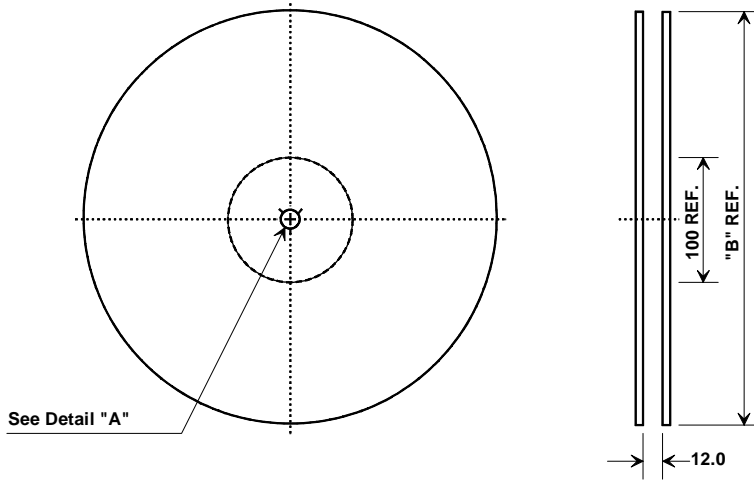
TOP VIEW



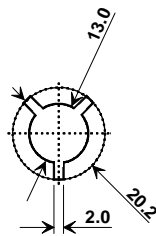
BOTTOM VIEW



Tape and Reel Specifications



"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.4 mm
Pitch	8.0 mm
W	12.0 mm

COMPONENT ORIENTATION and DIMENSIONS

