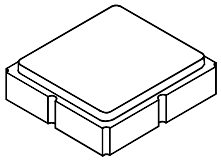
Preliminary

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

SF1219E

2338.75 MHz SAW Filter



SM3030-8

Maximum Rating

Rating	Value	Units
Input Power Level	+15	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Tape and Reel Storage Temperature Range	-40 to +85	°C
Solder Reflow Temperature, 10 seconds/5 cycles maximum	260	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			2338.75		MHz
Maximum Insertion Loss, 2332.5 to 2345 MHz	IL			3.0	3.8	dB
Amplitude Ripple, 2332.5 to 2345 MHz				0.2	1.0	dB_{P-P}
Group Delay Ripple, 2332.5 to 2345 MHz				2.8		ns_{P-P}
Group Delay				12		ns
Input Return Loss, 2332.5 to 2345 MHz			6.5	8.4		dB
Attenuation, 0 dB Reference:						
DC to 2224 MHz			35	41		dB
2453 to 2600 MHz			35	43		
2600 to 3000 MHz			40	44		
3000 to 6000 MHz			25	33		
Single-ended Source Impedance				50		ohm
Balanced Load Impedance				100		

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	953, YWWS
Standard Reel Quantity Reel Size 7 inch	500 Pieces/Reel
Reel Size 13 inch	3000 Pieces/Reel

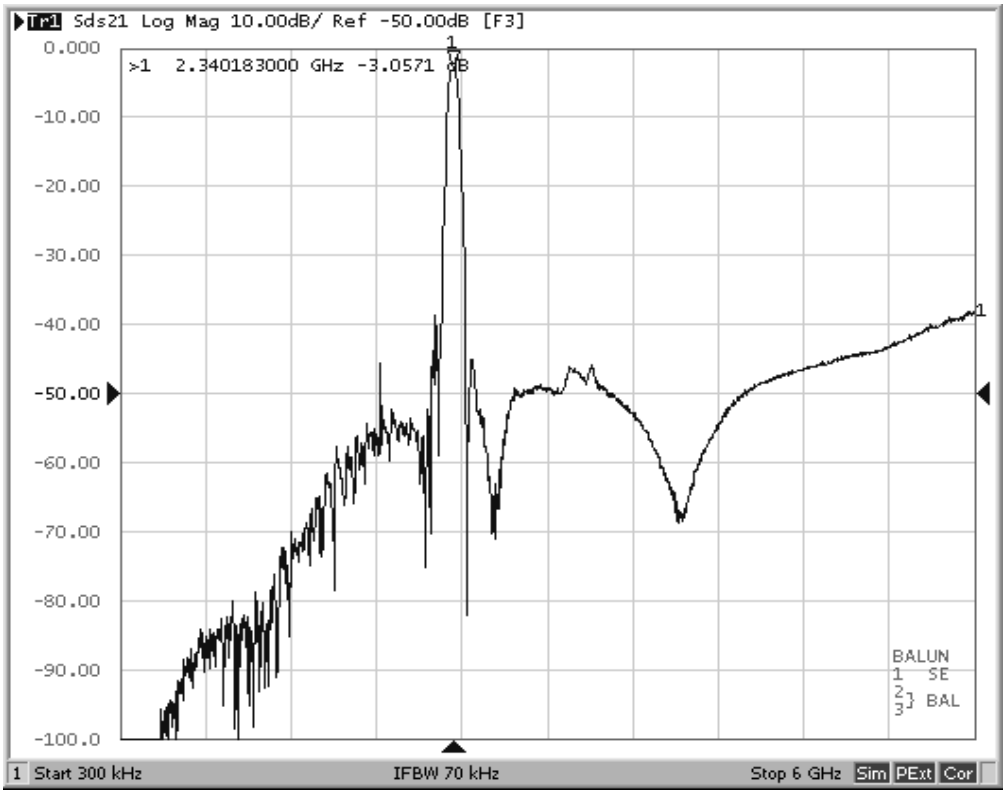
Electrical Connections

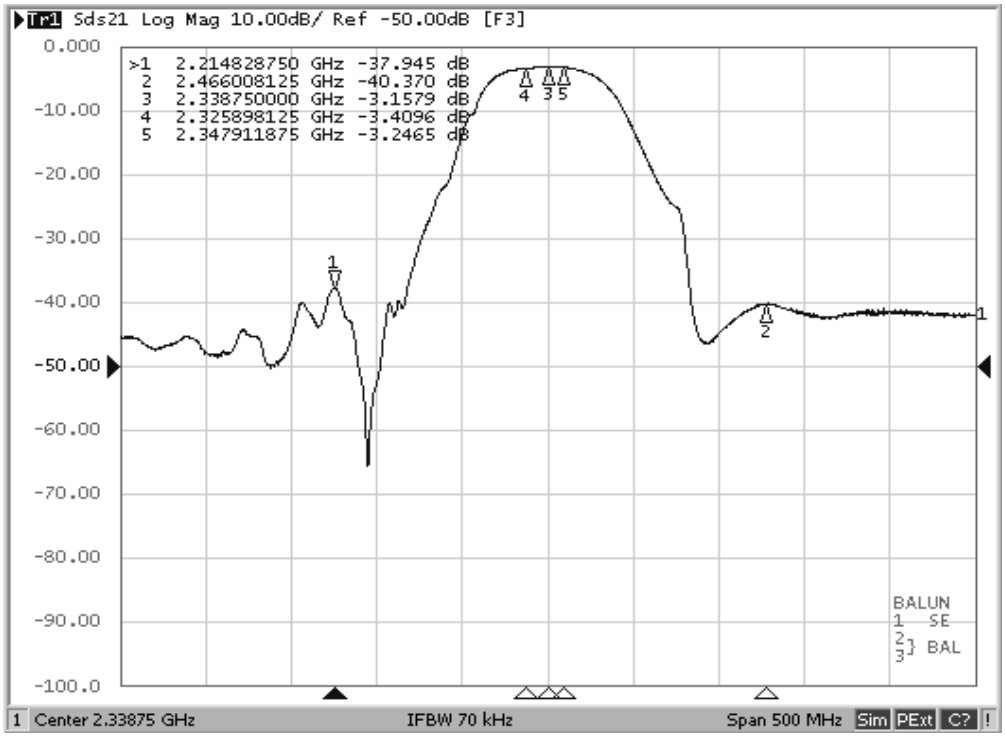
Connection	Terminals
Input	2
Balanced Output	5, 7
Case Ground	All others

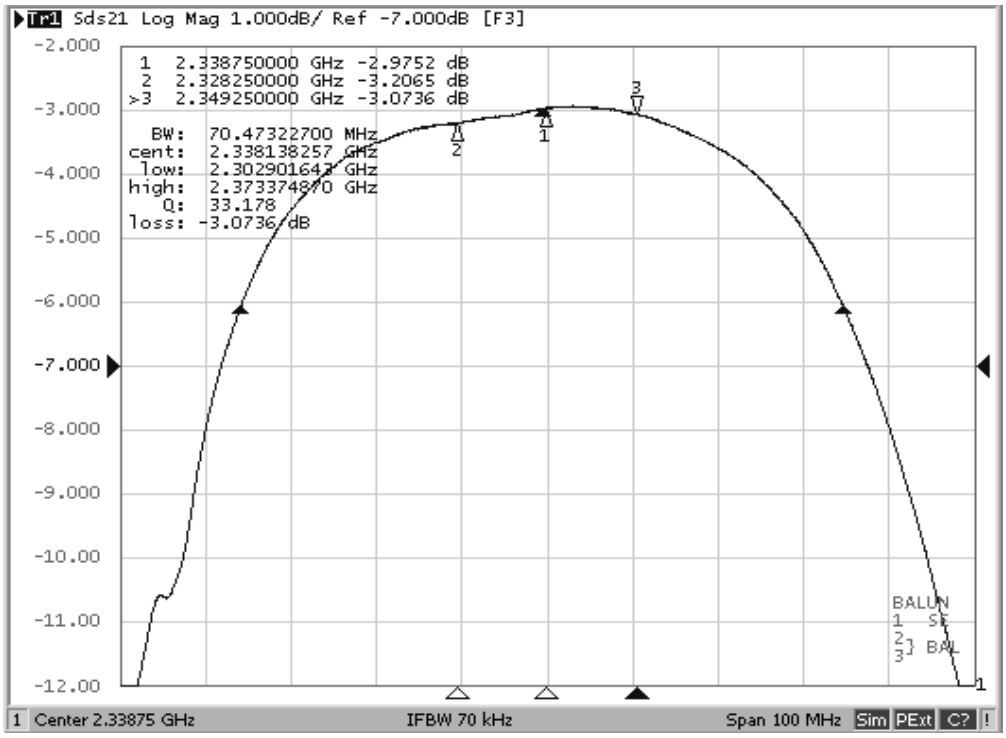
Notes:

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.

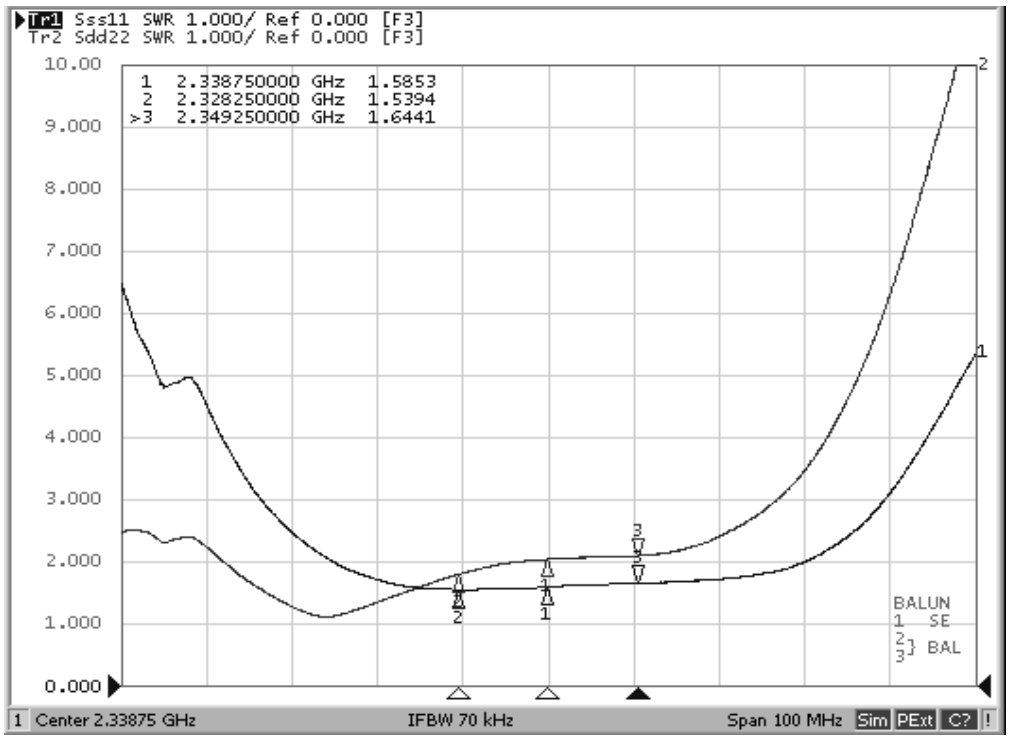
Filter Response Plots



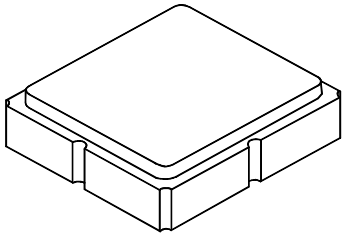


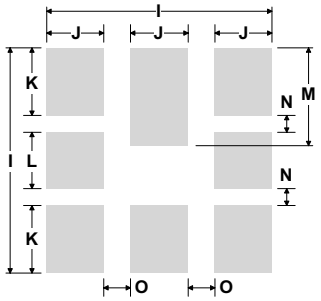


SWR Plots

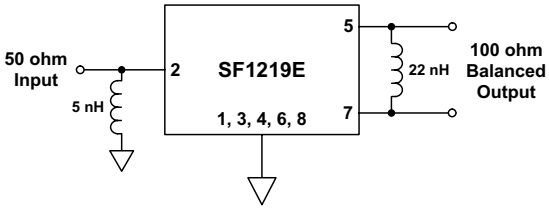


8-Terminal Ceramic Surface-Mount Case
3.0 X 3.0 mm Nominal Footprint





PCB Footprint Top View



Typical Tuning Network

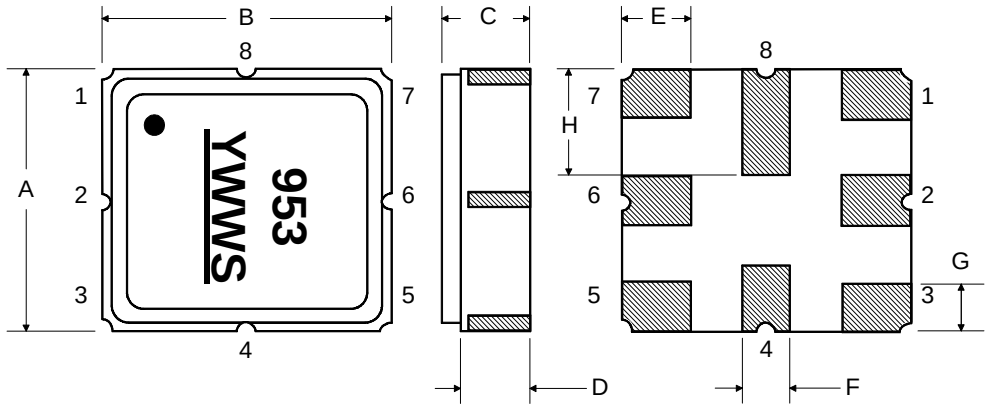
Case and PCB Footprint Dimensions

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	

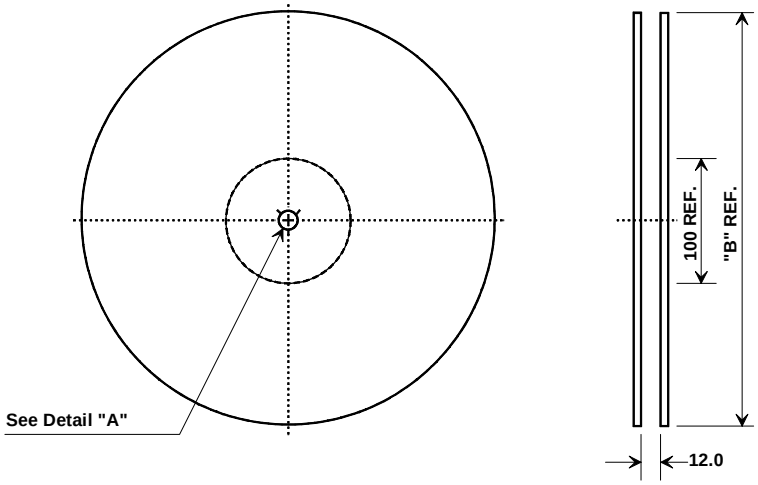
Case Materials

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	

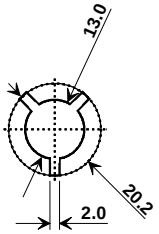
TOP VIEW BOTTOM VIEW



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