



- **SAW Filter for Digital Television**
- **Complies with Directive 2002/95/EC (RoHS)**



Characteristics :

Balance-to-balanced operation

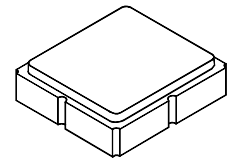
Terminating source/load impedance: $Z_S = 150 \Omega$

Maximum Rating

Rating	Value	Units
Input Power Level	0	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-50 to +95	°C
Maximum Soldering Profile, 5 cycles/ 10 seconds maximum	265	°C

SF2167E

1382.24 MHz SAW Filter



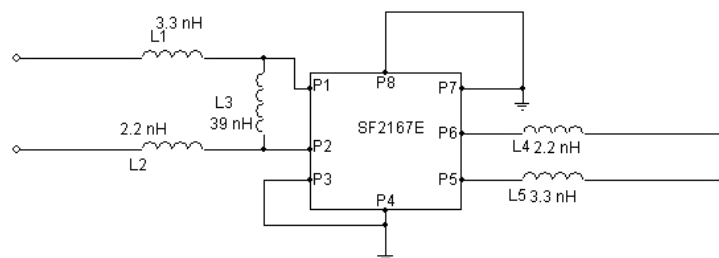
SM3030-8

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			1382.24		MHz
Insertion Loss, 1362.24 to 1402.24 MHz	IL			3.4	4.5	dB
Amplitude Ripple, 1362.24 to 1402.24 MHz				0.5	2.0	dB
Group Delay Ripple, 1362.24 to 1402.24 MHz				10	30	nSp,p
Attenuation, 0 dB Reference:						
500 to 1300.18 MHz			42	52		dB
1464.30 to 1490 MHz			45	50		
1490 to 2000 MHz			40	50		

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	854, YWWS					
Standard Reel Quantity	Reel Size 7 inch	500 Pieces/Reel				
	Reel Size 13 inch	3000 Pieces/Reel				

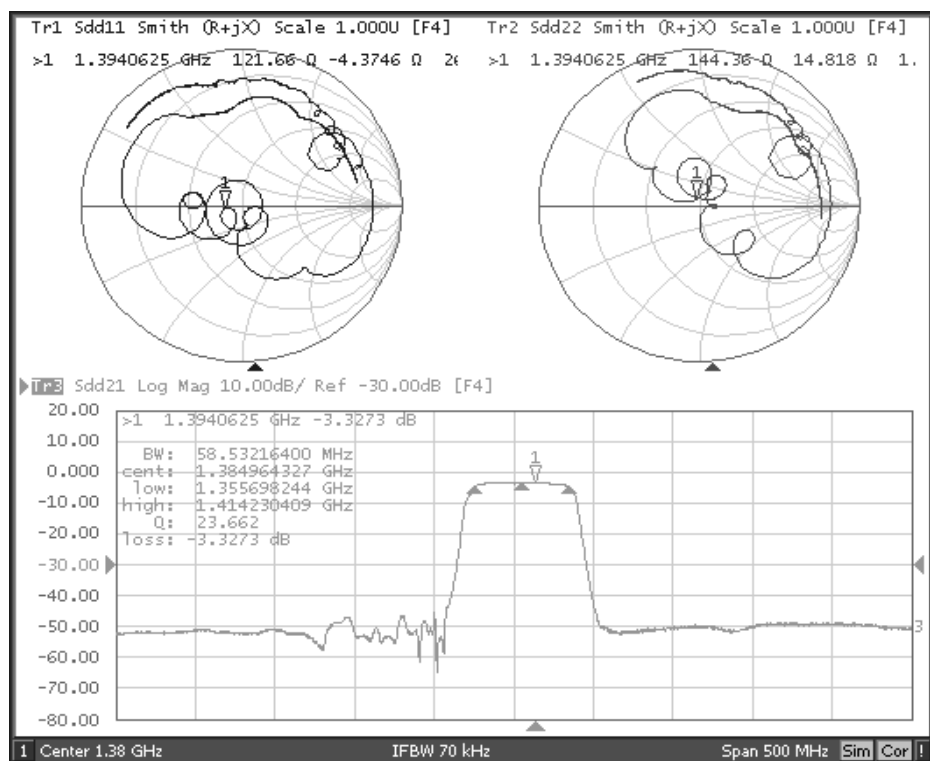
Tuning Network, 150 ohm Balanced Source/Load



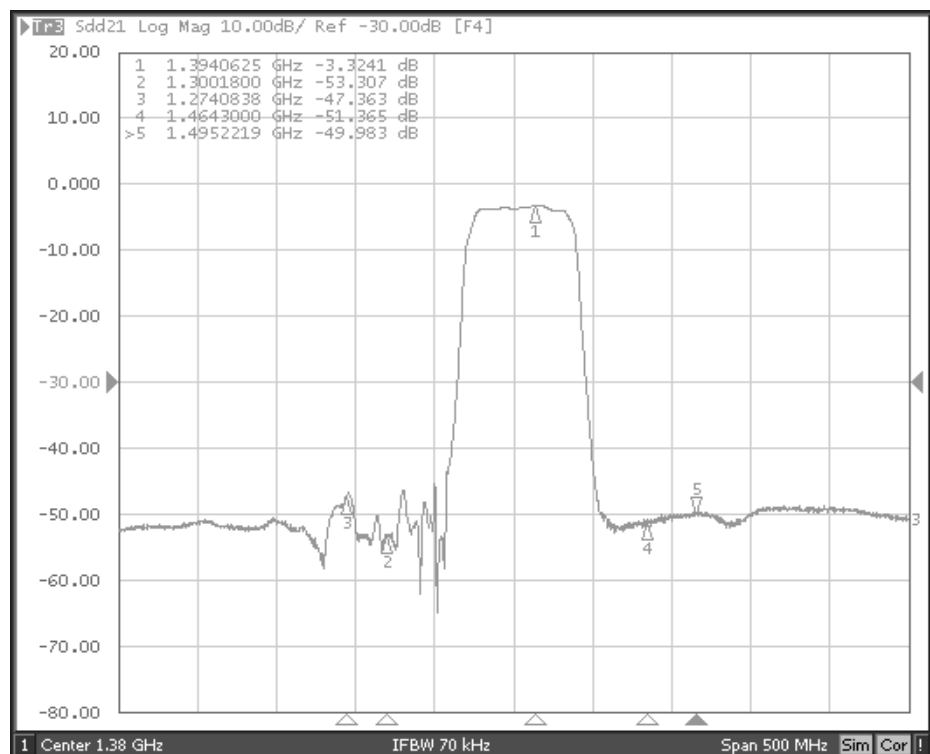
Notes:

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.

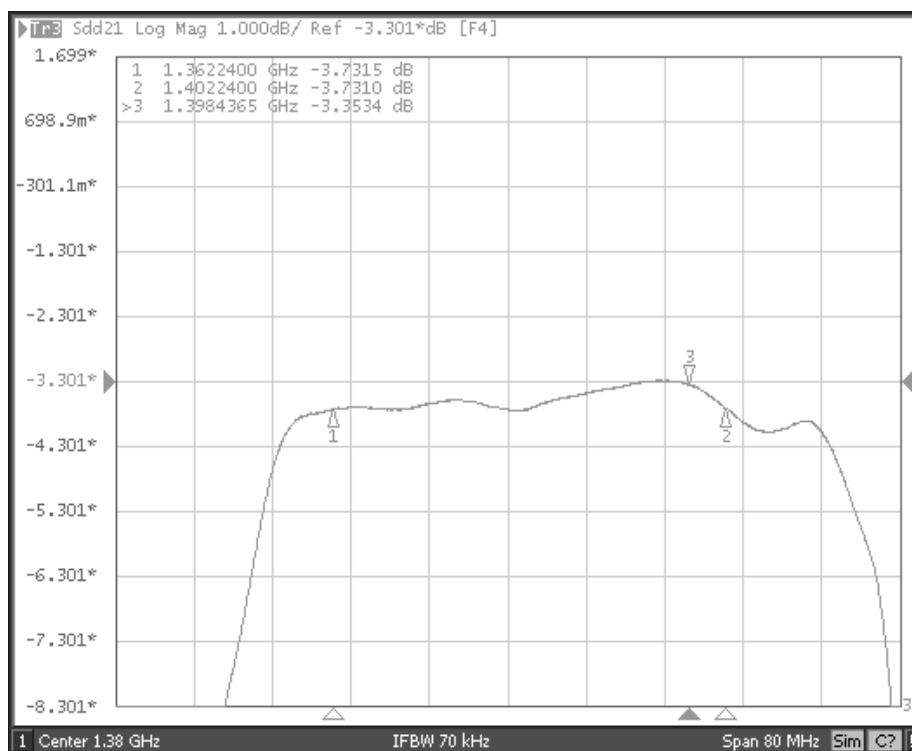
Filter Wideband S21, S11 and S22 Plots



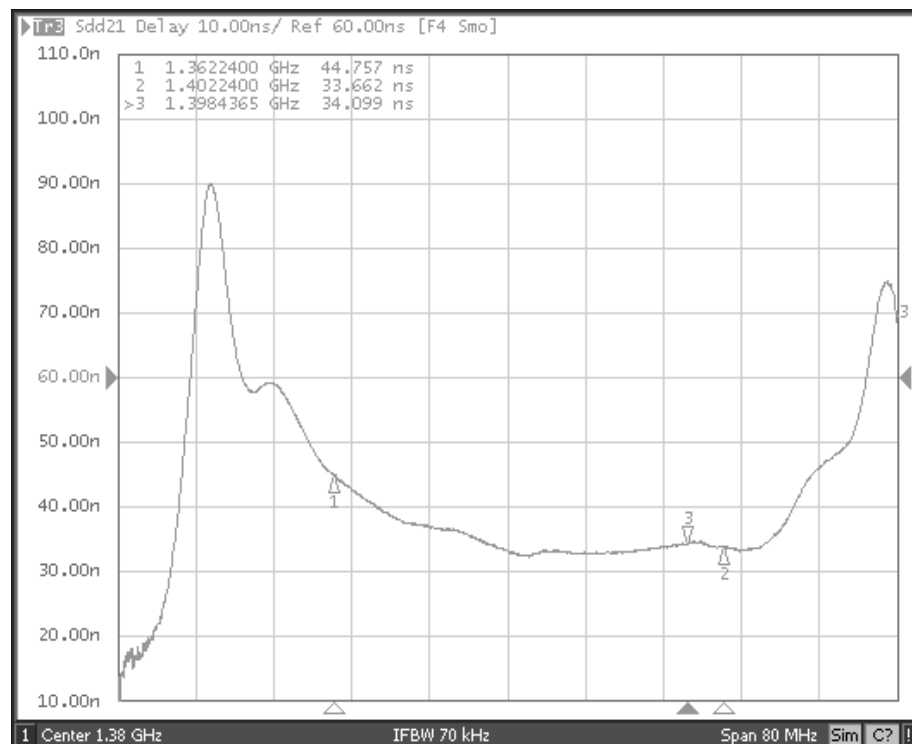
Filter Shape Factor Plot



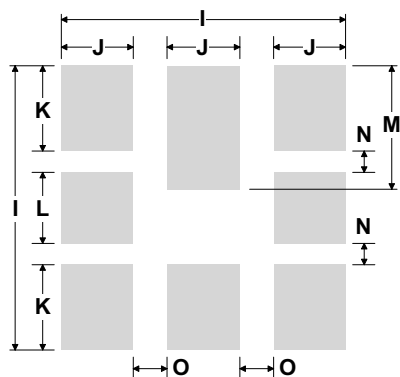
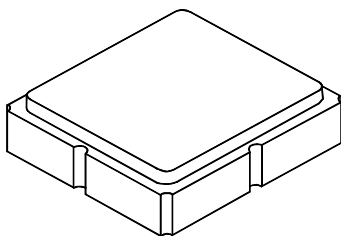
Filter Passband Plot



Filter Group Delay Plot



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



PCB Footprint Top View

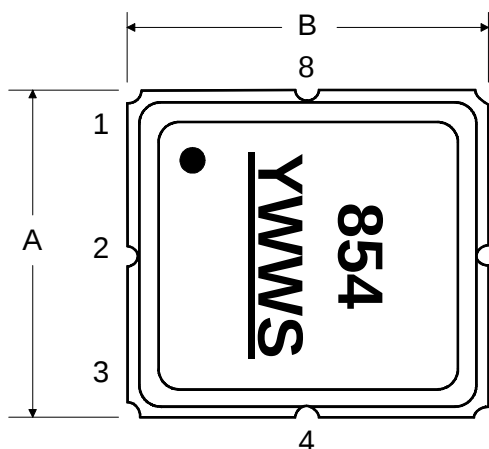
Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	1.14	1.27	1.40	0.045	0.050	0.055
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	

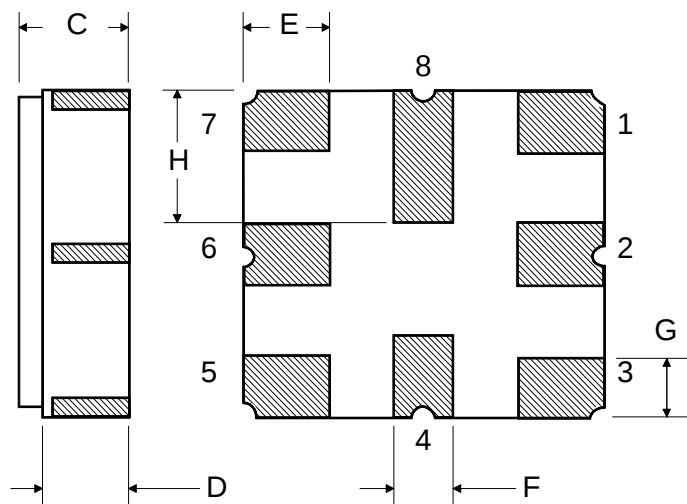
Case Materials

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



Technical drawing of a circular component, likely a flange or end plate, showing three views: a top view, a side view, and a detail view of the central hole.

Top View: A large circle with a smaller concentric circle in the center. A horizontal dashed line and a vertical dashed line intersect at the center. A leader line points from the text "See Detail 'A'" to the center of the inner circle.

Side View: Two vertical lines representing the thickness of the component. The total thickness is dimensioned as 12.0. The distance from the centerline to the outer edge is dimensioned as 100 REF. The distance from the centerline to the inner edge is dimensioned as "B" REF.

Detail View (Detail A): A cross-section of the central hole. It shows a circular hole with a diameter of 20.2. The hole is surrounded by a ring with a thickness of 2.0. The outer diameter of the ring is dimensioned as 13.0.

“B”		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000

Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.40 mm
Pitch	8.0 mm
W	12.0 mm

