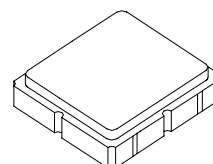




- Filter, 2535 MHz, 70 MHz BW, 2.2 dB Insertion Loss
- 3.0 x 3.0 x 1.4 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS)

**SF2158E****2535.00 MHz
SAW Filter****SM3030-6****Absolute Maximum Ratings**

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
Maximum Soldering Profile, 5 Cycles/10 seconds Maximum	265	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c			2535		MHz
Insertion Loss, 2500 to 2570 MHz	IL			2.2	3.6	dB
Amplitude Ripple, 2500 to 2570 MHz				0.8	2.2	dB
VSWR, 2500 to 2570 MHz				2:1	2.2:1	
Attenuation Referenced to 0 dB:						dB
DC to 2100 MHz			25	31		
2100 to 2400 MHz			27	34.5		
2650 to 4000 MHz			30	38		
4000 to 5000 MHz			20	23		

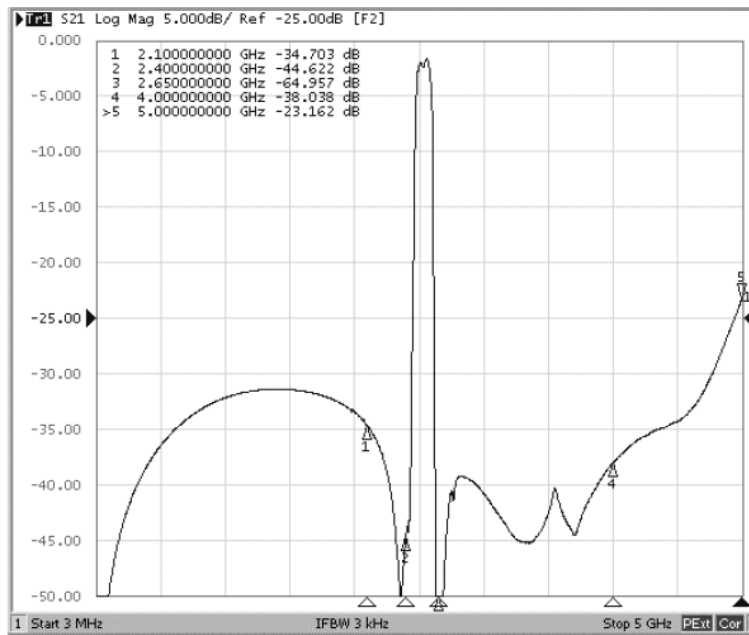
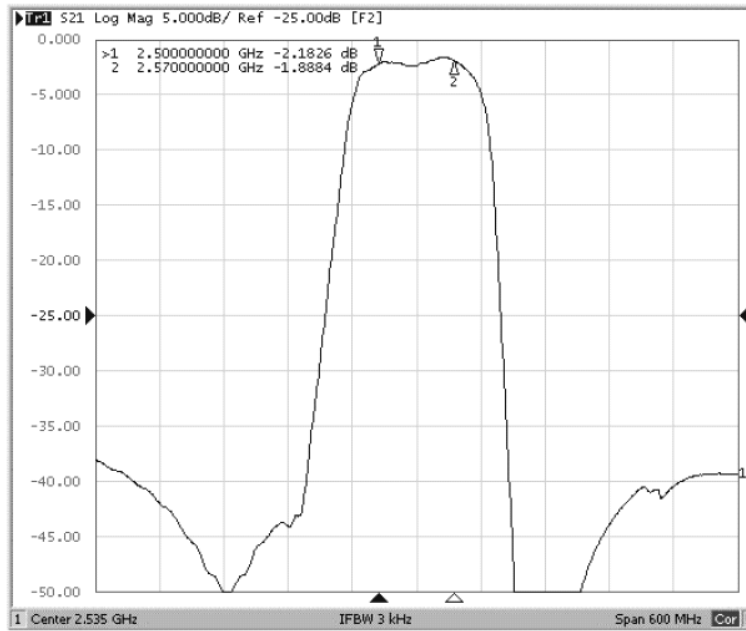
Case Style	SM3030-6 3.0 x 3.0 x 1.4 mm Nominal Footprint					
Lid Symbolization, Y=year, WW=week, S=shift	822 // YWWS					
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel				
	Reel Size 13 Inch	3000 Pieces/Reel				

Electrical Connections

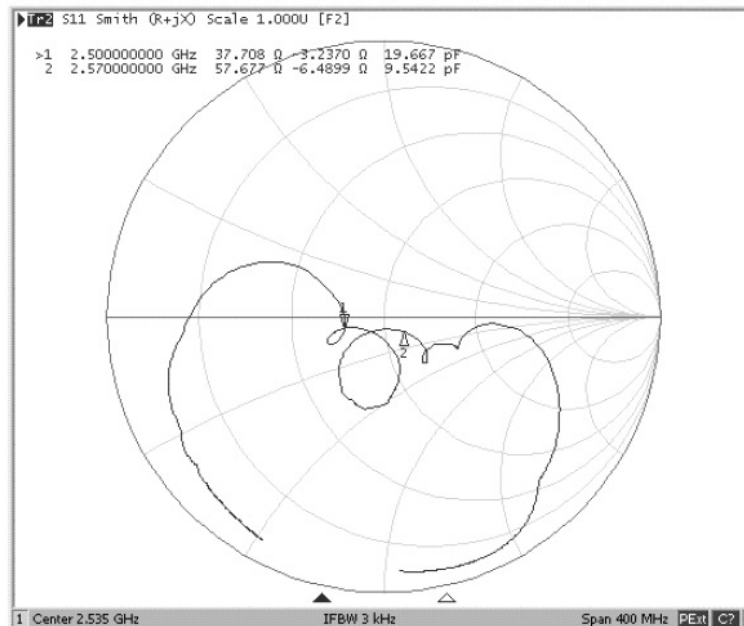
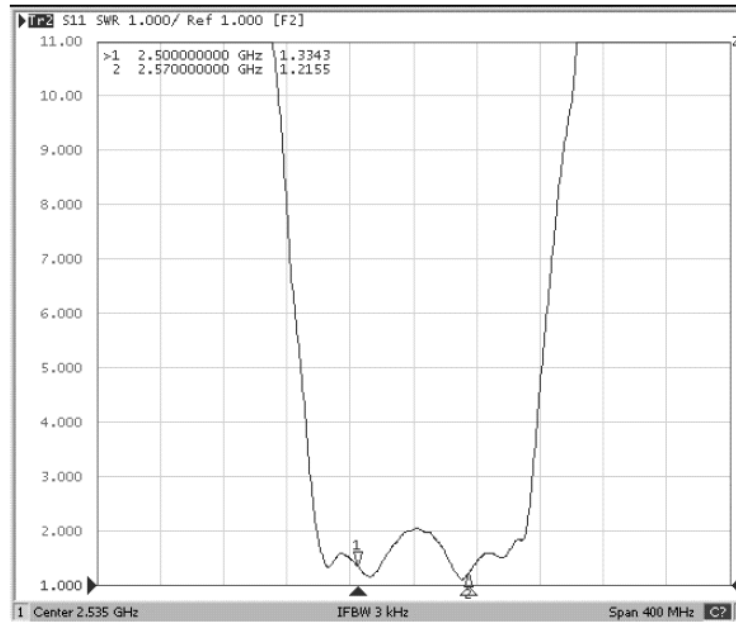
Connection		Terminals
Port 1	Input	2
Port 2	Output	5
	Ground	All others
Dot indicates Pin 1		

**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.****Notes:**

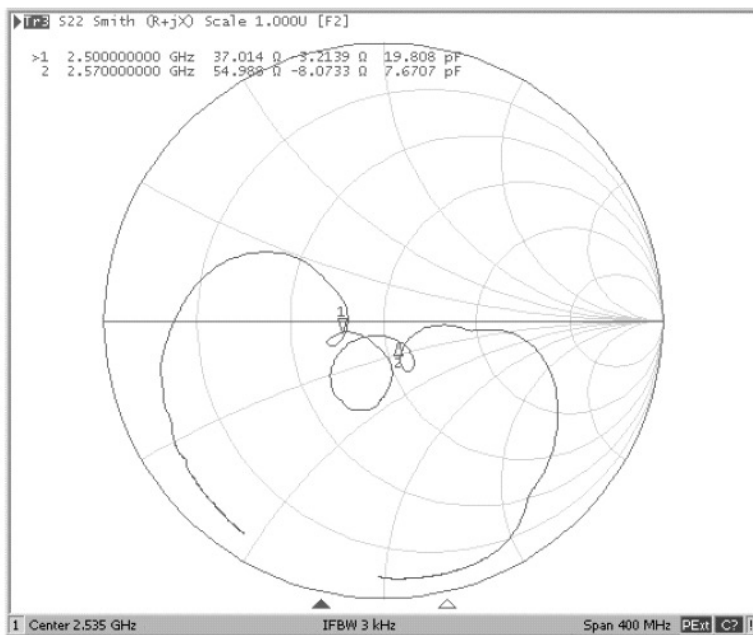
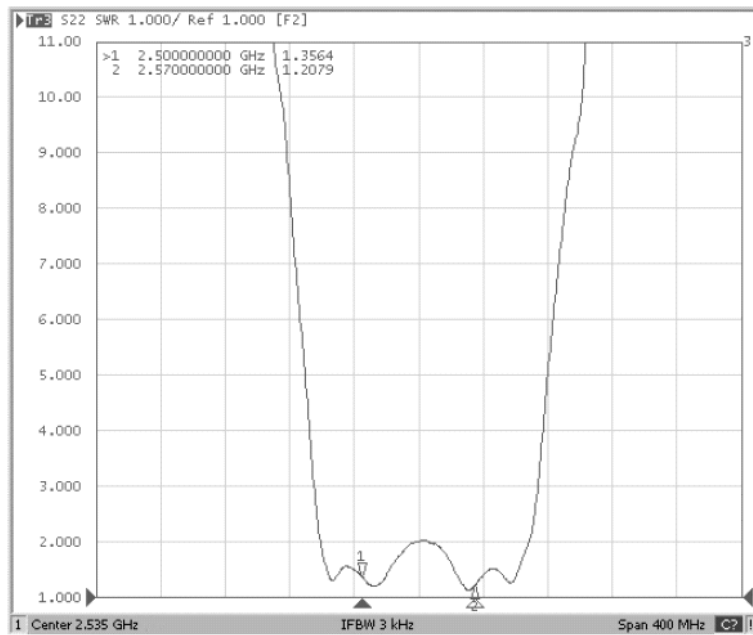
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_c .
3. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
4. The design, manufacturing process, and specifications of this filter are subject to change.
5. US and international patents may apply.
6. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.



S11

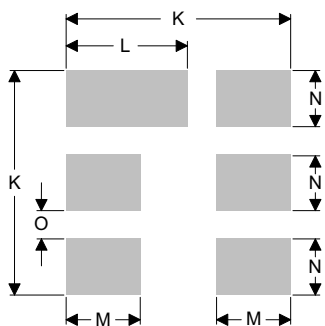
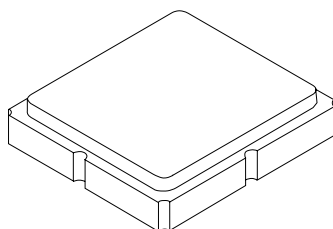


S22



SM3030-6 Case

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



PCB Footprint Top View

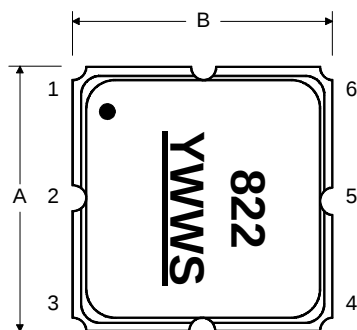
Case and PCB Footprint Dimensions

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	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.50	1.63	0.054	0.059	0.064
I	0.47	0.60	0.73	0.019	0.024	0.029
J	1.17	1.30	1.43	0.046	0.051	0.056
K		3.20			0.126	
L		1.70			0.067	
M		1.05			0.041	
N		0.81			0.032	
O		0.38			0.015	

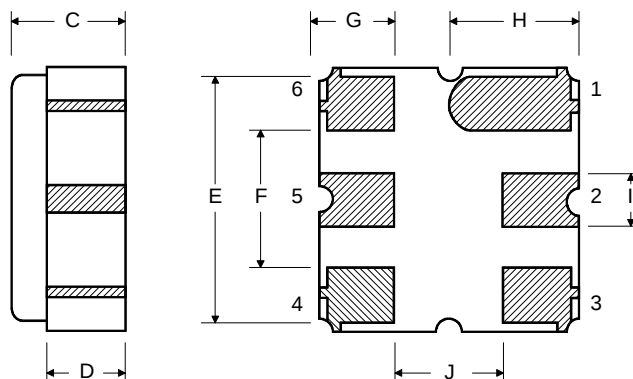
Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O 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.

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 small circle with a crosshair is located at the center of the inner circle. An arrow points from the text "See Detail 'A'" to this central feature.

Side View: Two vertical rectangles representing the component's profile. The left rectangle is slightly wider than the right one. A horizontal dashed line passes through the center of both. Dimension lines indicate a height of "100 REF." for the left rectangle and "B" REF." for the right rectangle. A dimension of "12.0" is shown at the bottom, indicating the distance between the centerlines of the two rectangles.

Detail View (A): A cross-sectional view of the central feature. It shows a circular hole with a diameter of 13.0. The hole is surrounded by a flange with a thickness of 2.0. The outer diameter of the flange is 20.2. The view is centered on a horizontal dashed line.

“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

