

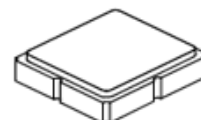
- **Low-loss RF SAW Filter**
- **Miniature 3 x 3 mm SMD Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-grounded Terminal	3	V
Operable Temperature Range	-20 to +70	°C
Storage Temperature Range	-40 to +85	°C
Maximum Soldering Profile, 2 cycles/10 seconds minimum	260	°C

SF2747E

2067.5 MHz SAW Filter



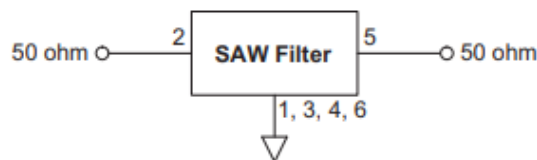
SM3030-6

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c			2067.5		MHz
Insertion Loss 2025.5 - 2109.5 MHz	IL			3.3	4.0	dB
Amplitude Ripple 2025.5 - 2109.5 MHz				1.6	2.5	dB
VSWR 2025.5 - 2109.5 MHz				2.0	2.5	
Group Delay 2025.5 - 2109.5 MHz				13	25	ns
Attenuation, Referenced to 0 dB:						dB
@ 1800 MHz			30	33		
@ 1994 MHz			10	30		
@ 2300 MHz			30	36		
Load / Source Impedance	Z_S Z_L			50		Ω
Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	55, YWWS					
Standard Reel Quantity	Reel Size 7 inch	1000 Pieces/Reel				
	Reel Size 13 inch	3000 Pieces/Reel				

Electrical Connections

Connection	Terminals
Input	2
Output	5
Case Ground	All others

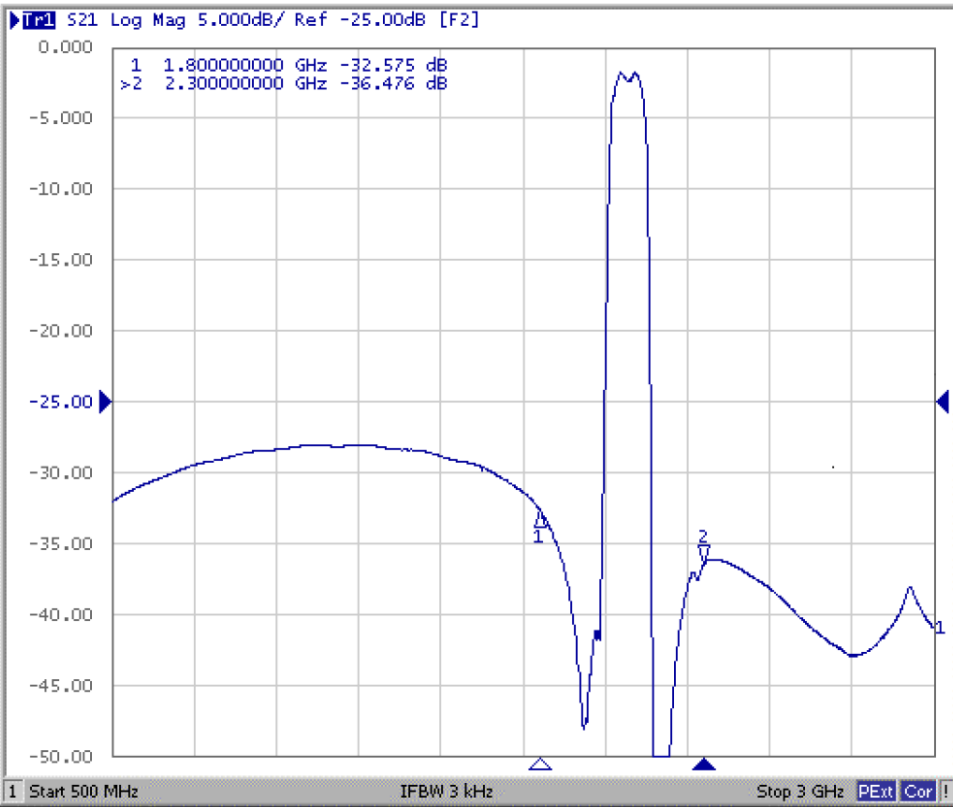
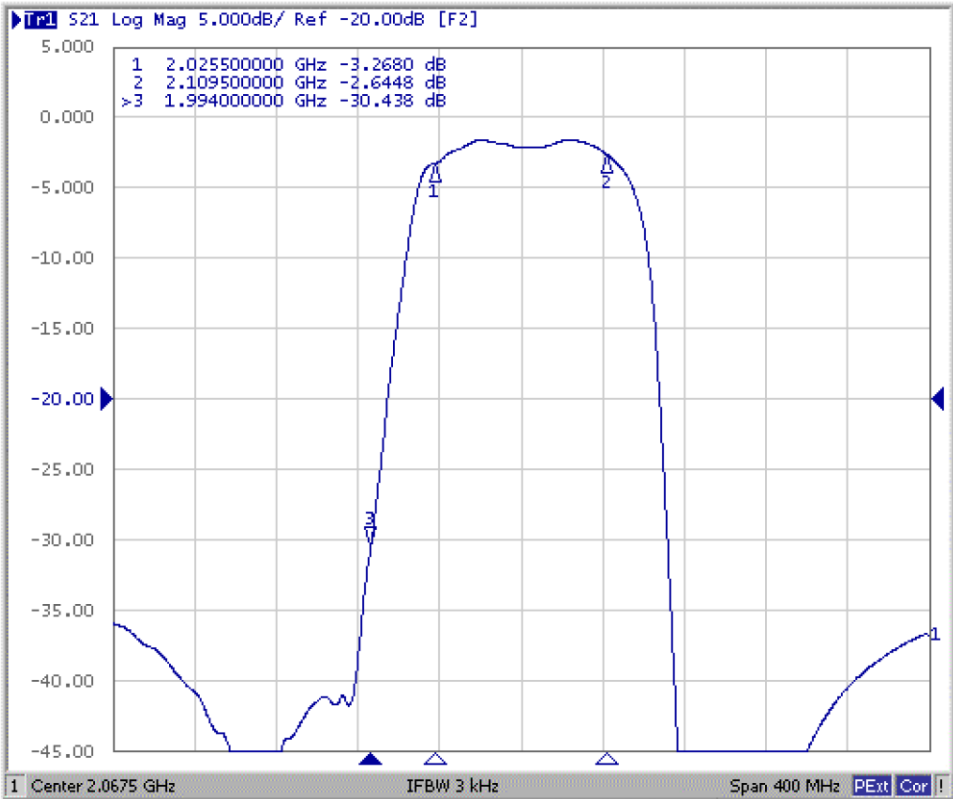


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

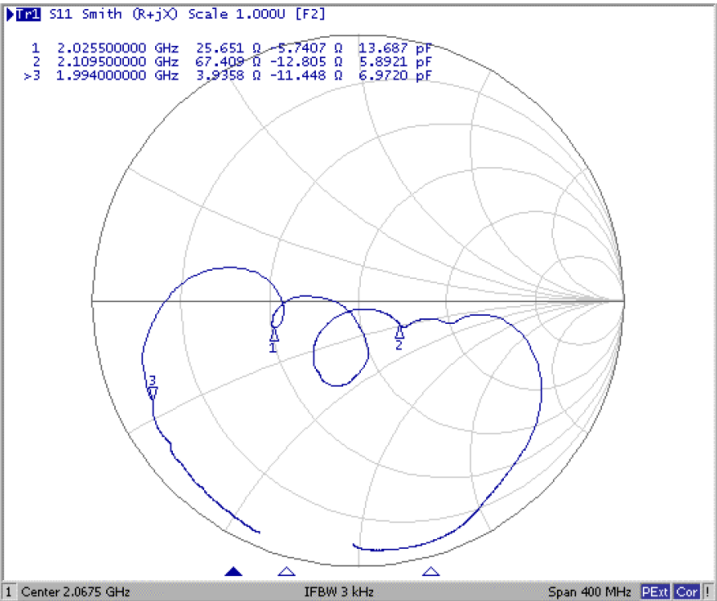
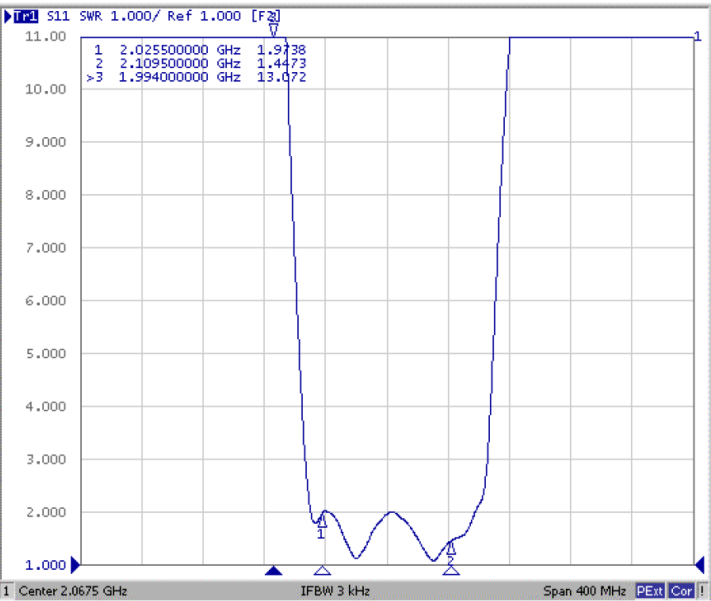
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

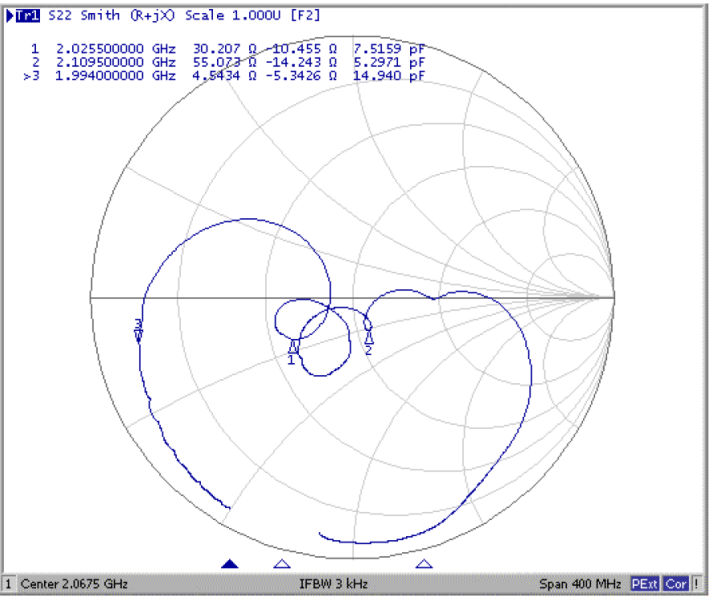
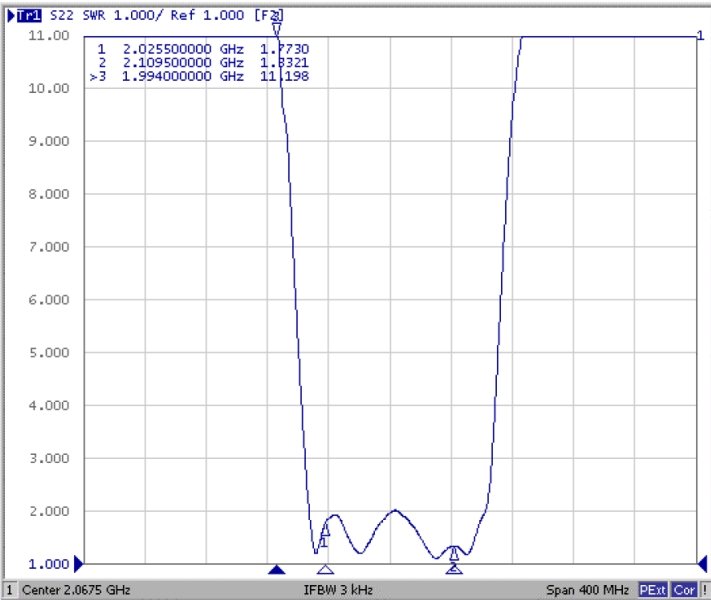


Frequency Characteristics

S11

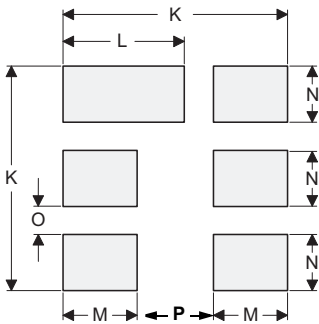
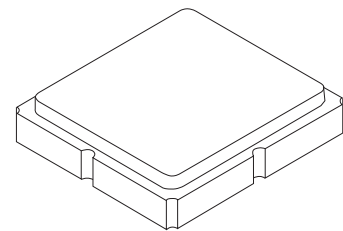


S22



SM3030-6 Case

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



PCB Footprint Top View

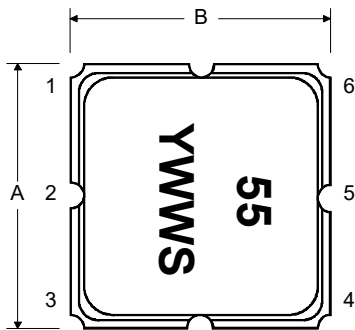
Case and PCB Footprint Dimensions

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	-	-	1.40	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	-
P	-	1.09	-	-	0.039	-

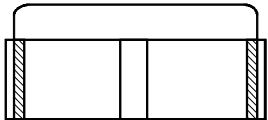
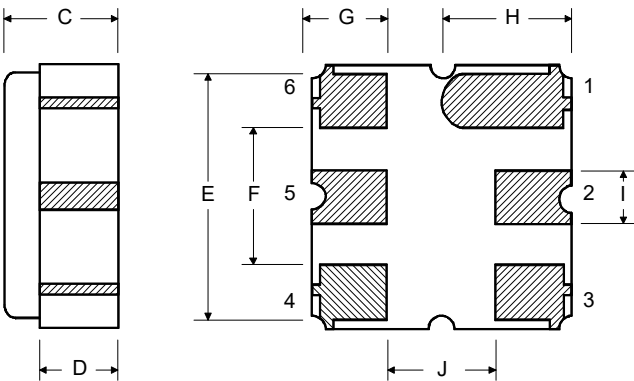
Case Materials

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

TOP VIEW

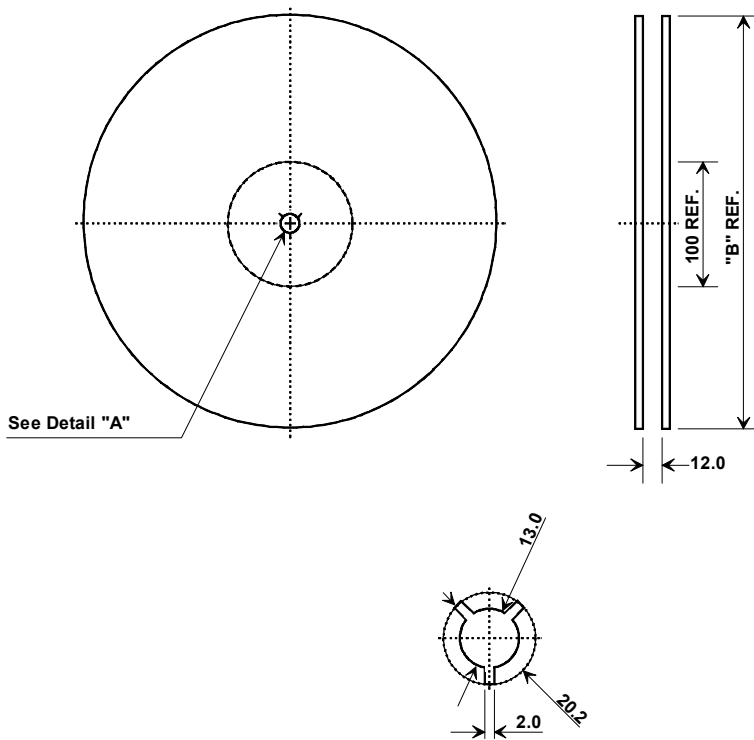


BOTTOM VIEW



Tape and Reel Specifications

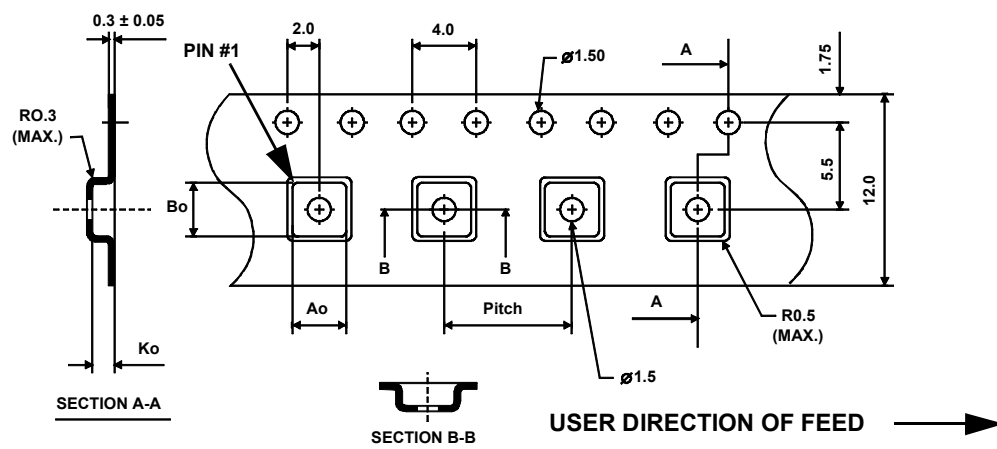
Tape and Reel Standard per ANSI/EIA481



“B”		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	3.35 ±0.1 mm
Bo	3.35 ±0.1 mm
Ko	1.40 ±0.1 mm
Pitch	8.0 ±0.05 mm
W	12.0 ±0.3 mm



RECOMMENDED REFLOW PROFILE

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (20 - 40 sec)
4. Time: 2 times.

