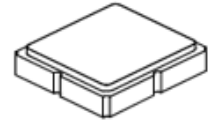


- **Low-loss RF SAW Filter**
- **Miniature 3 x 3 mm SMD Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

SF2746E
**2250 MHz
SAW Filter**

SM3030-6
Absolute Maximum Ratings

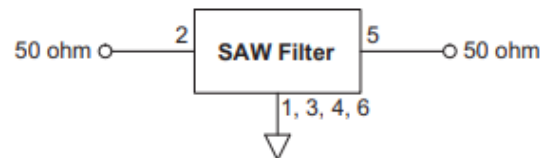
Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-grounded Terminal	3	V
Operable Temperature Range	-20 to +70	°C
Storage Temperature Range	-40 to +85	°C
Maximum Soldering Profile, 2 cycles/10 seconds minimum	260	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c			2250		MHz
Insertion Loss 2200- 2300 MHz	IL			3.2	4.5	dB
Amplitude Ripple 2200 - 2300 MHz				1.9	3.0	dB
VSWR 2200 - 2300 MHz				1.9	2.5	
Attenuation, Referenced to 0 dB:						
DC to 2160 MHz			25	28		dB
2340 to 4000 MHz			25	32.5		
Load / Source Impedance	$Z_s \quad Z_L$			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	6Z, YWWS					
Standard Reel Quantity	Reel Size 7 inch	1000 Pieces/Reel				
	Reel Size 13 inch	3000 Pieces/Reel				

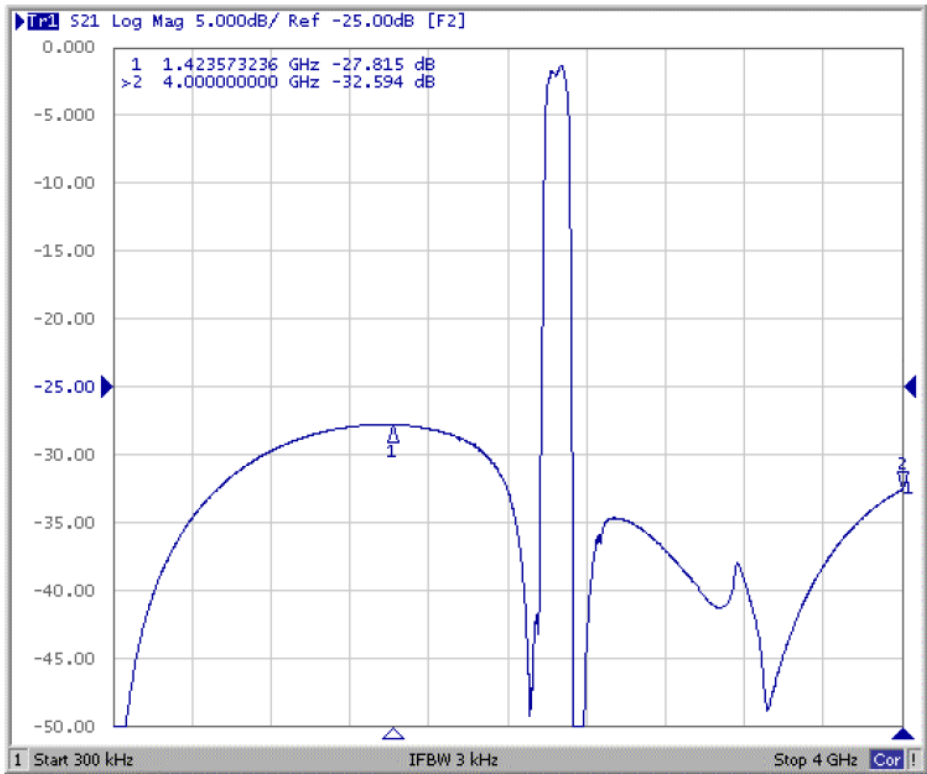
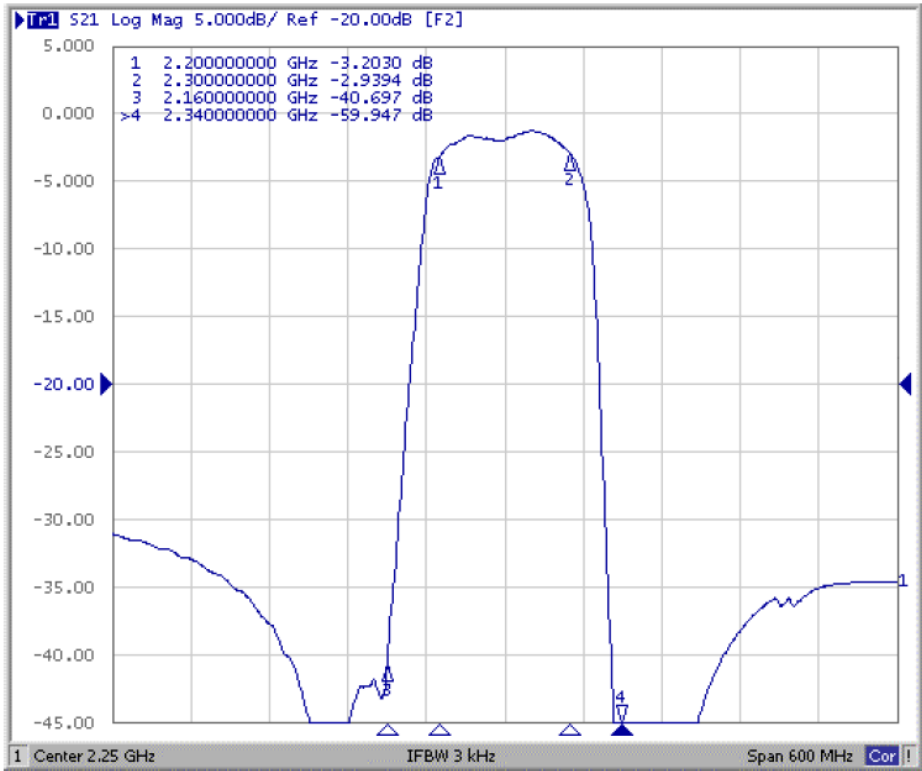
Electrical Connections

Connection	Terminals
Input	2
Output	5
Case Ground	All others


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.
NOTES:

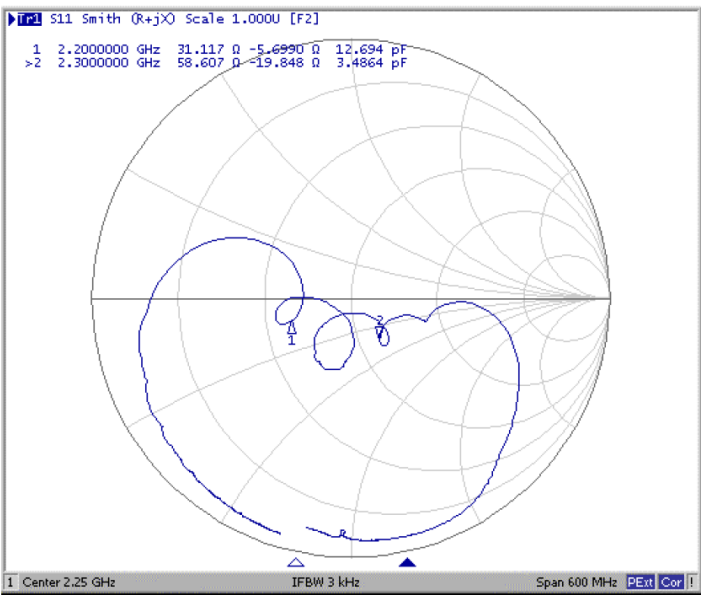
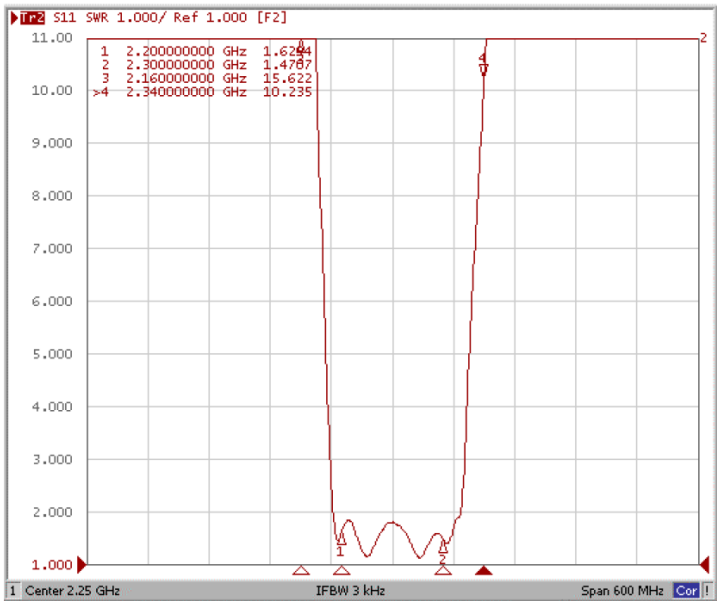
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

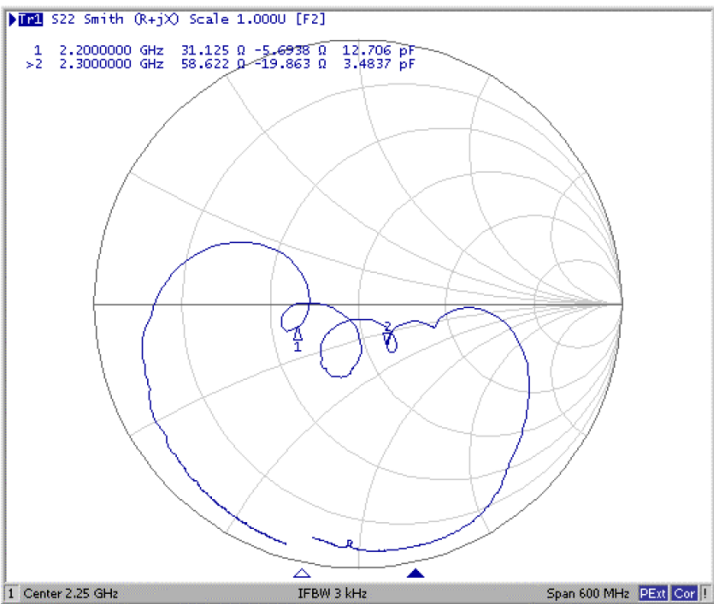
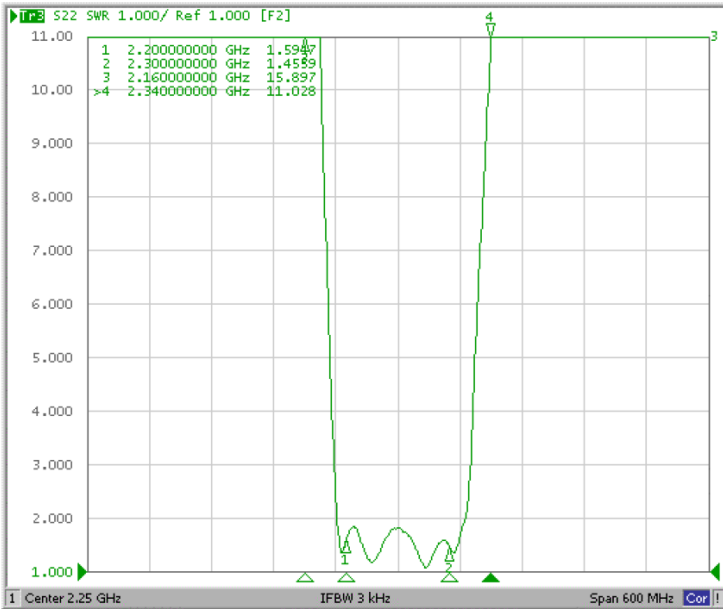


Frequency Characteristics

S11

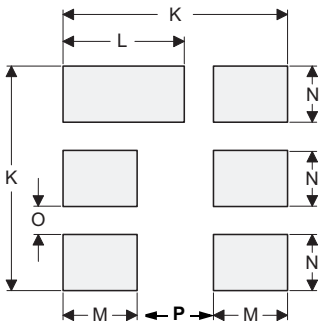
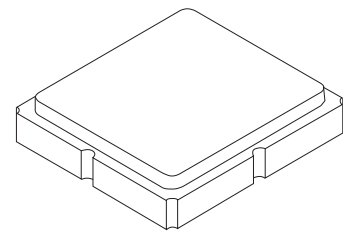


S22



SM3030-6 Case

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



PCB Footprint Top View

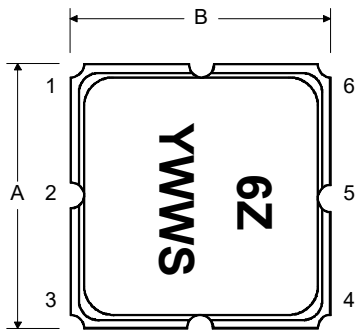
Case and PCB Footprint Dimensions

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	-

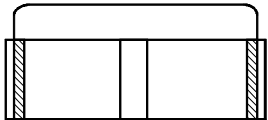
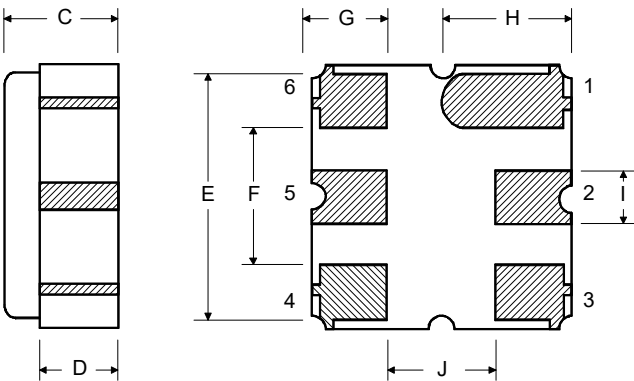
Case Materials

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

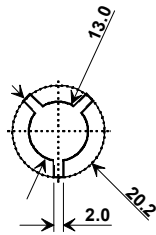


BOTTOM VIEW

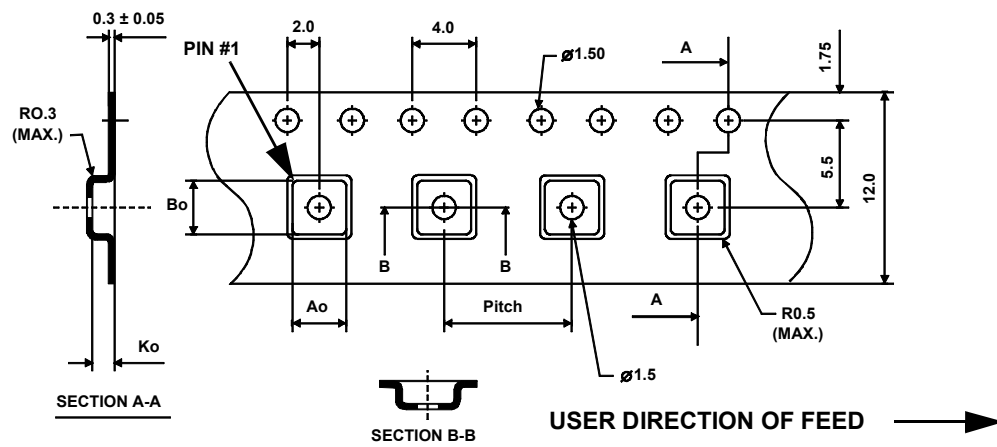


See Detail "A"

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



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.

