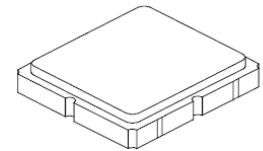


SF2160E

**2330 MHz
SAW Filter**



SM3030-6

- RF SAW Filter, 2330 MHz, 60 MHz BW
- 3.0 x 3.0 x 1.4 mm Surface-mount Case
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1

Absolute Maximum Ratings

Rating	Value	Units
Input Power	+10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Component Storage Temperature Range	-50 to +95	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile, 5 Cycles/10 seconds Maximum	265	°C
HBM level = 250V/MM level = 200V/CDM level = 1000V		

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c			2330		MHz
Insertion Loss 2300 to 2360 MHz	IL			2.4	3.2	dB
Amplitude Ripple:						
2300 to 2360 MHz				1.1	2	dB
2300 to 2320 MHz				0.3	1	
2320 to 2340 MHz				0.6	1	
2340 to 2360 MHz				0.5	1	
Return Loss 2300 to 2360 MHz			9	9.5		dB
Attenuation Referenced to 0 dB:						
DC to 2085 MHz			25	30		dB
2097 to 2235 MHz			25	36		
2235 to 2256 MHz			15	29		
Case Style			SM3030-6 3 x 3 x 1.4 mm Surface-Mount			
Lid Symbolization, Y=year, WW=week, S=shift)			826, YWWS			

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others

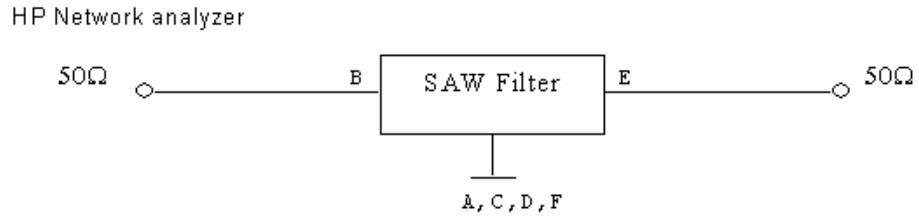


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

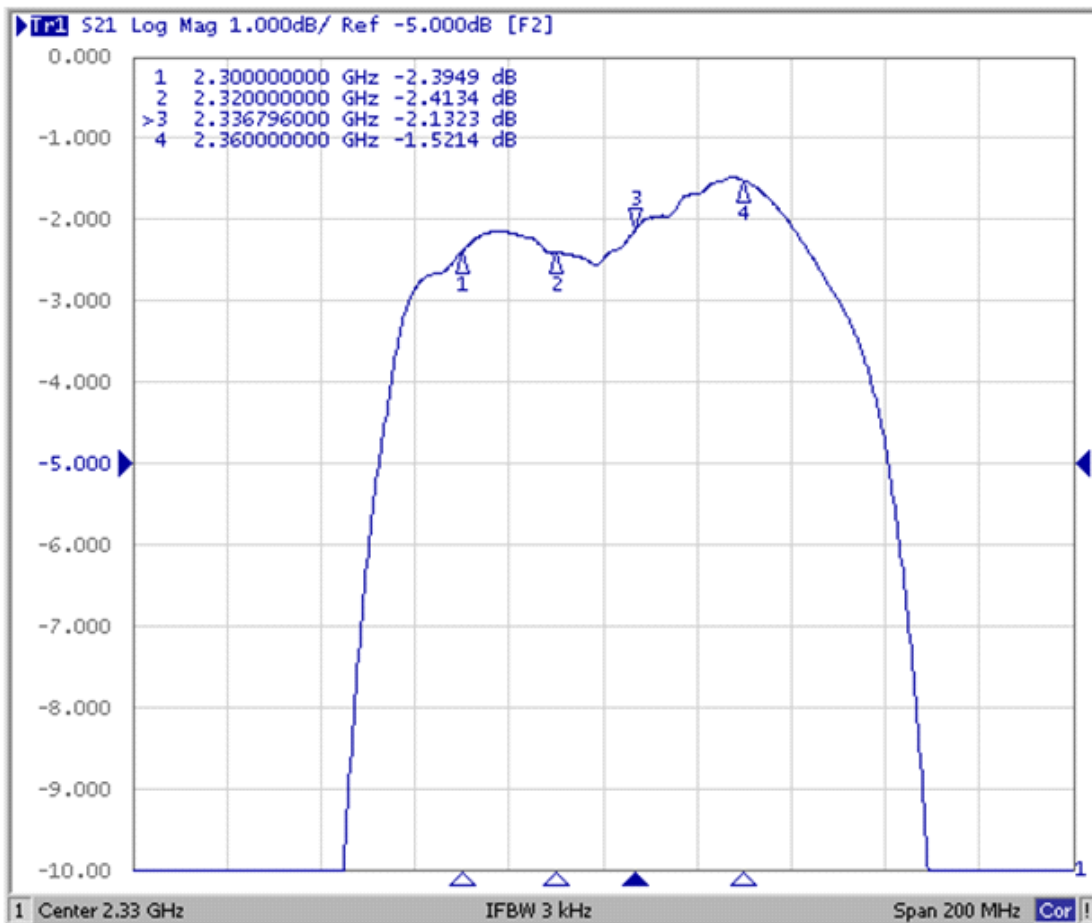
NOTES:

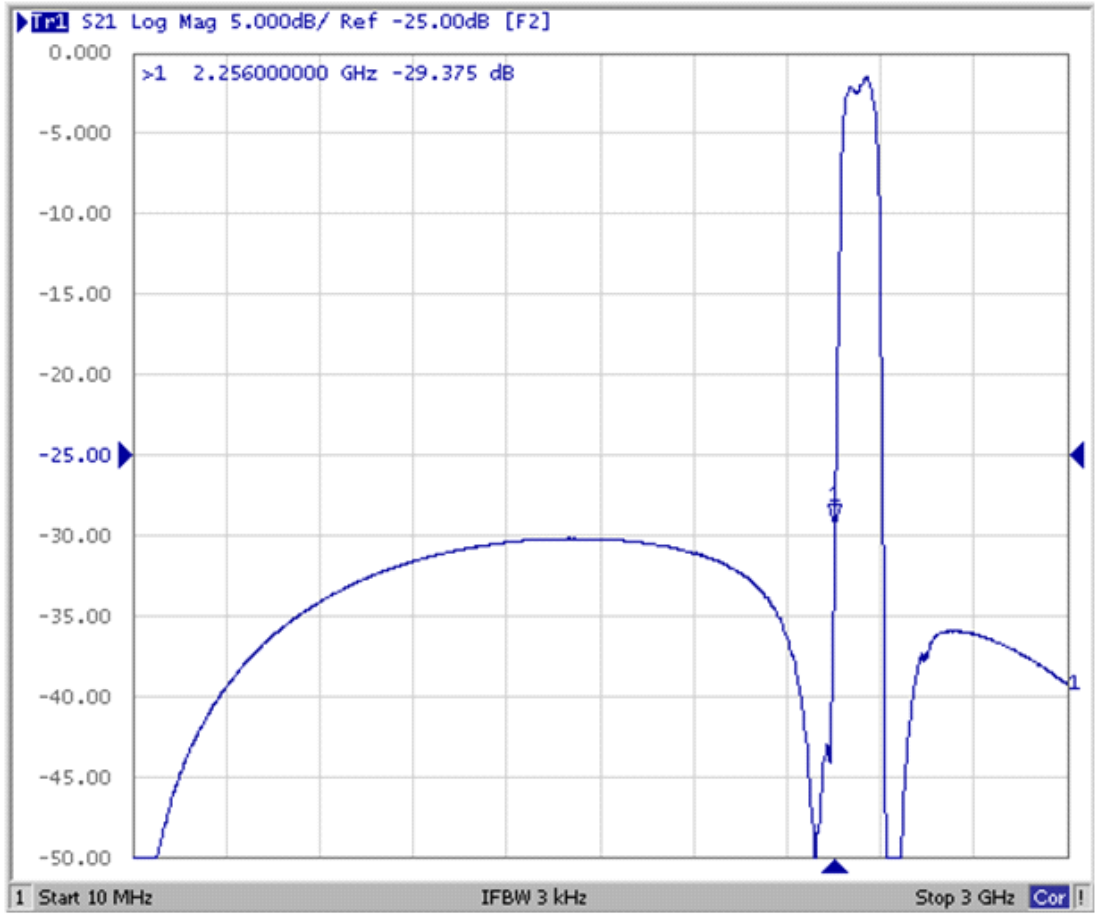
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Testing Environment

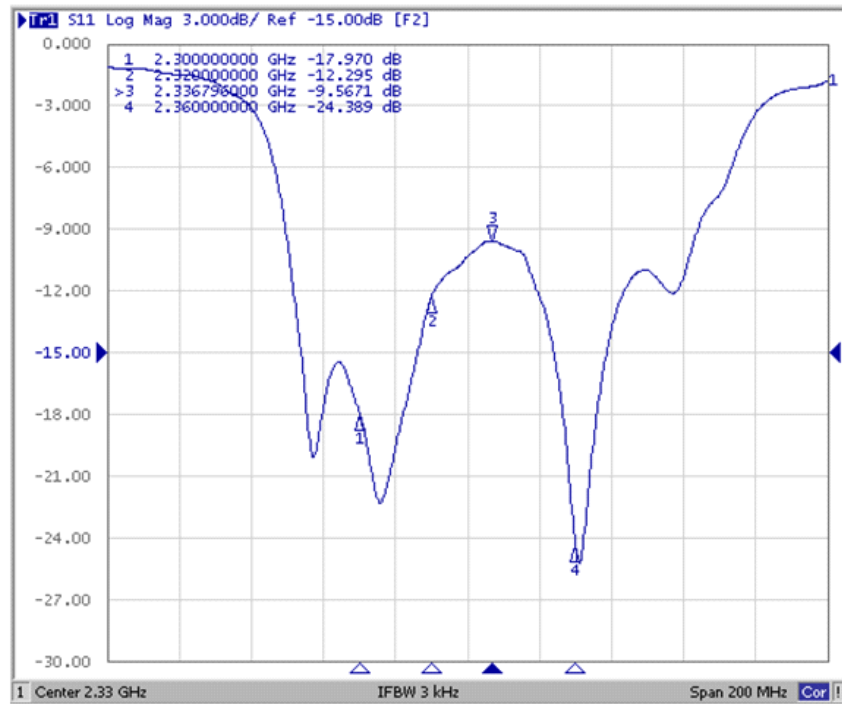


Frequency Response

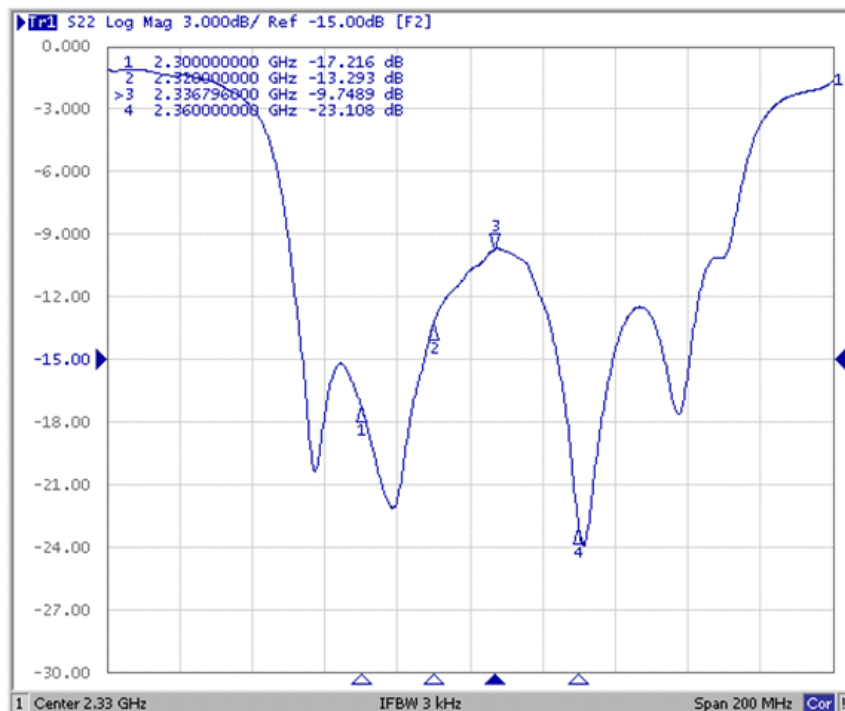




S11

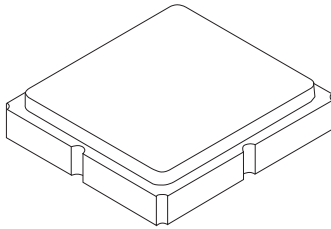


S22



SM3030-6 Case

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



PCB Footprint Top View

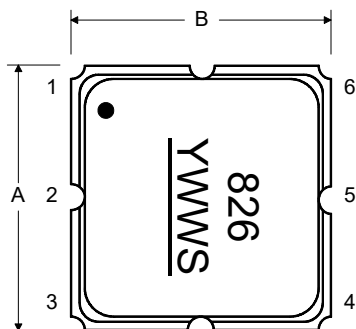
Case and PCB Footprint Dimensions

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	

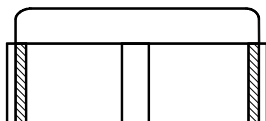
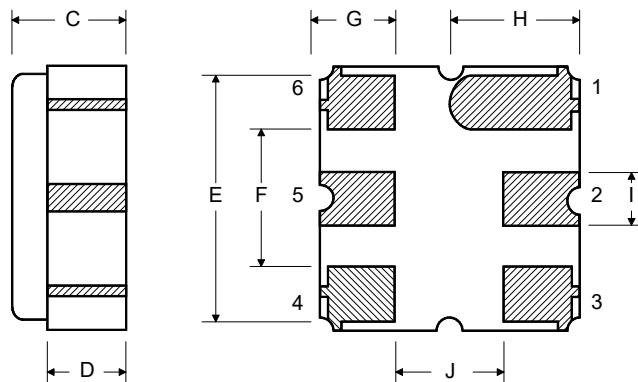
Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel
Lid Plating	2.0 to 3.0 μm Nickel
Body	Al_2O_3 Ceramic

TOP VIEW

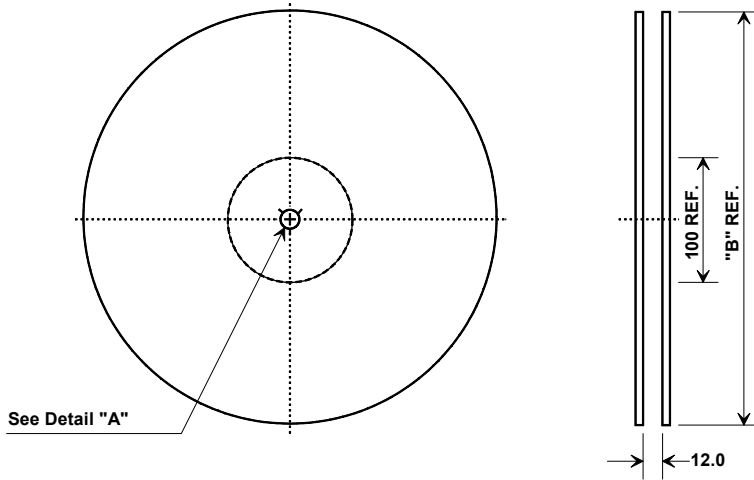


BOTTOM VIEW

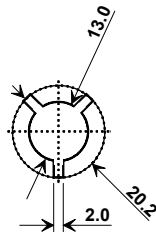


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA481

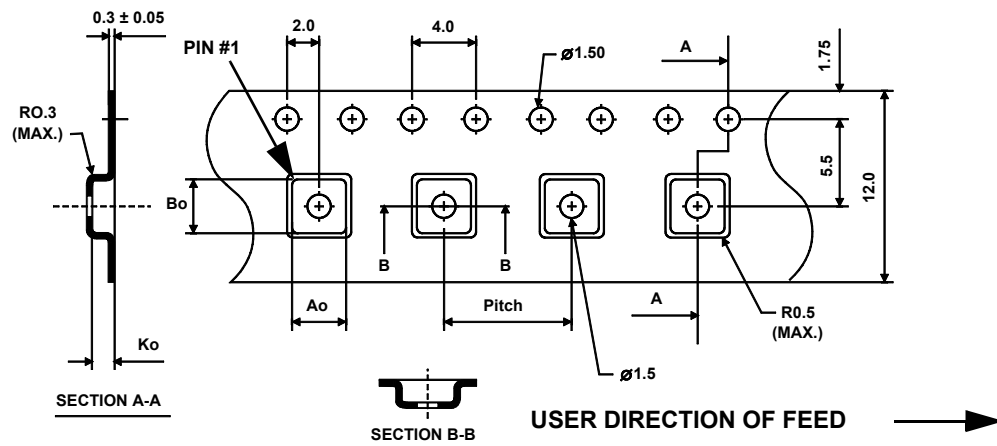


"B"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

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



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180° for 60~90 seconds.
2. Ascending time to preheating temperature 150° shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C peak (10 seconds.)
4. Time: 5 times maximum

