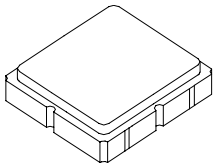
SF2160E

2330 MHz SAW Filter

- ***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)***



SM3030-6

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

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, See note 4				826 // YWWS			

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others

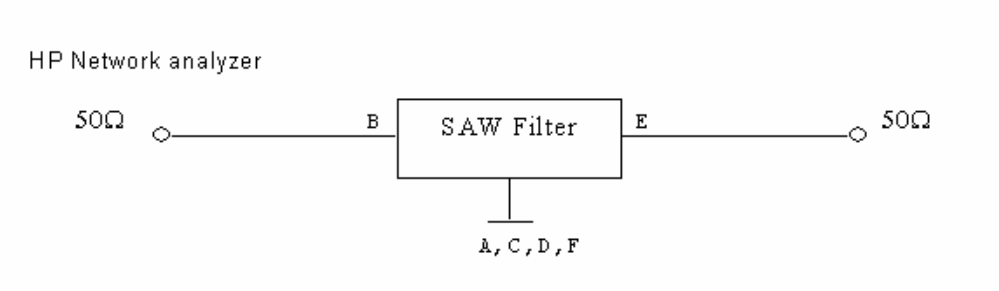
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

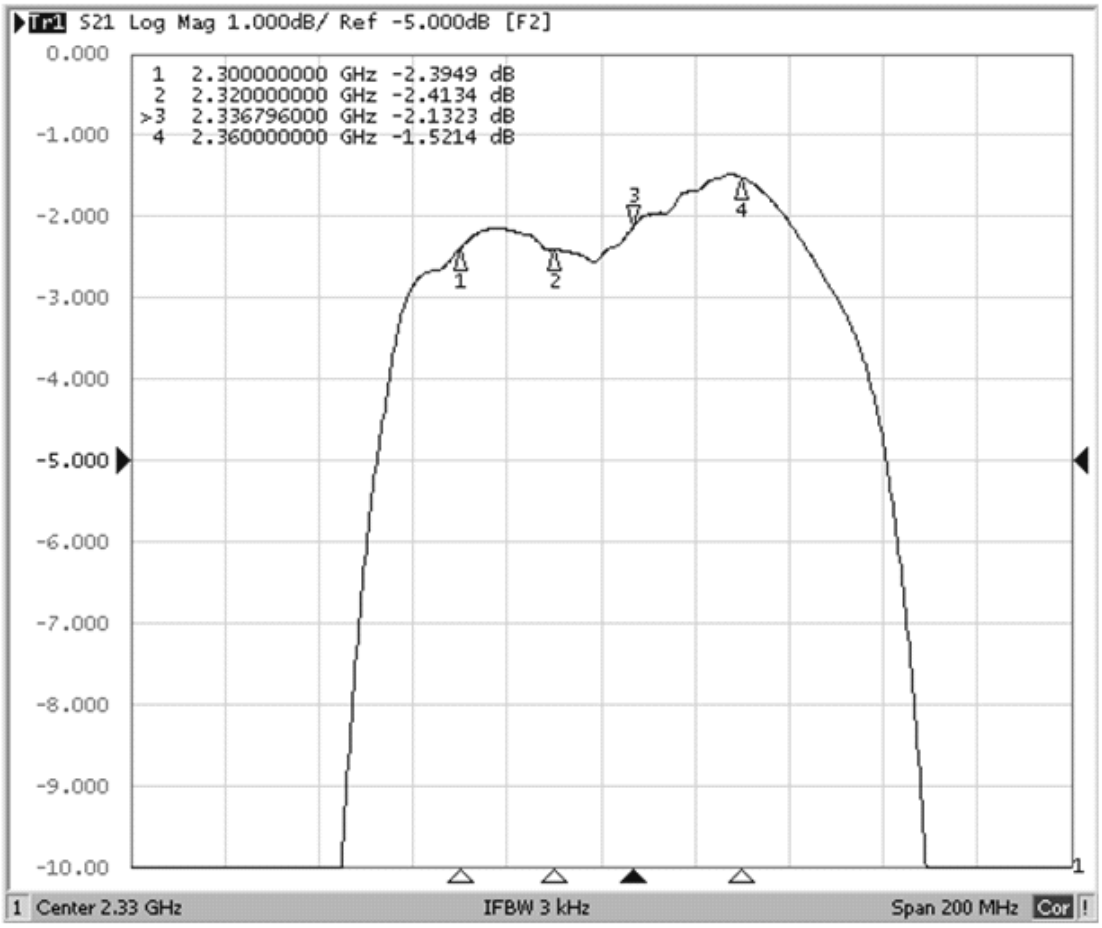
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
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. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
5. The design, manufacturing process, and specifications of this filter are subject to change.
6. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
7. US and international patents may apply.
8. RFM, stylized RFM logo, and RF Monolithics, Inc., are registered trademarks of RF Monolithics, Inc.

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Testing Environment



Frequency Response

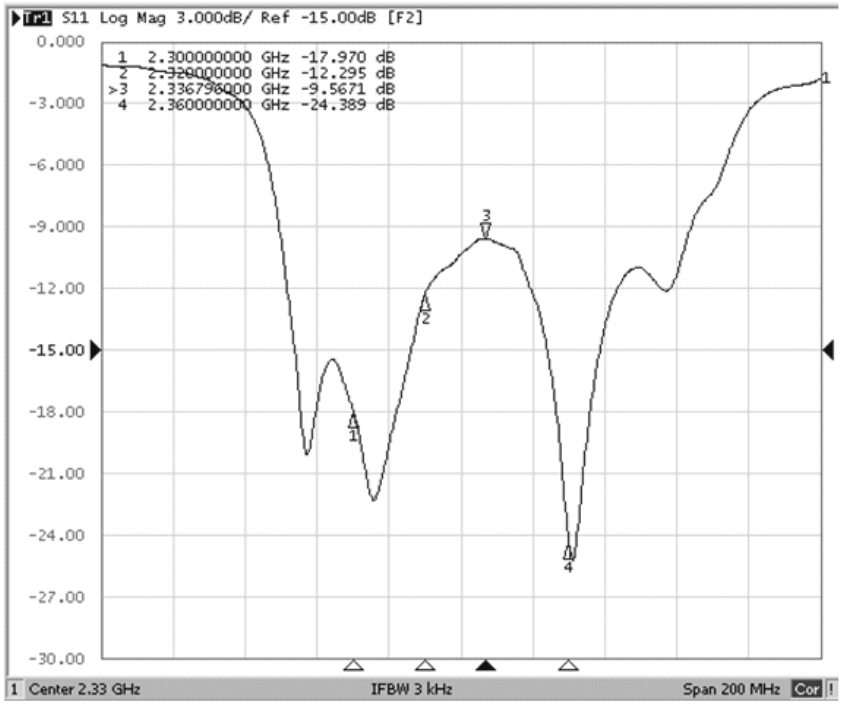


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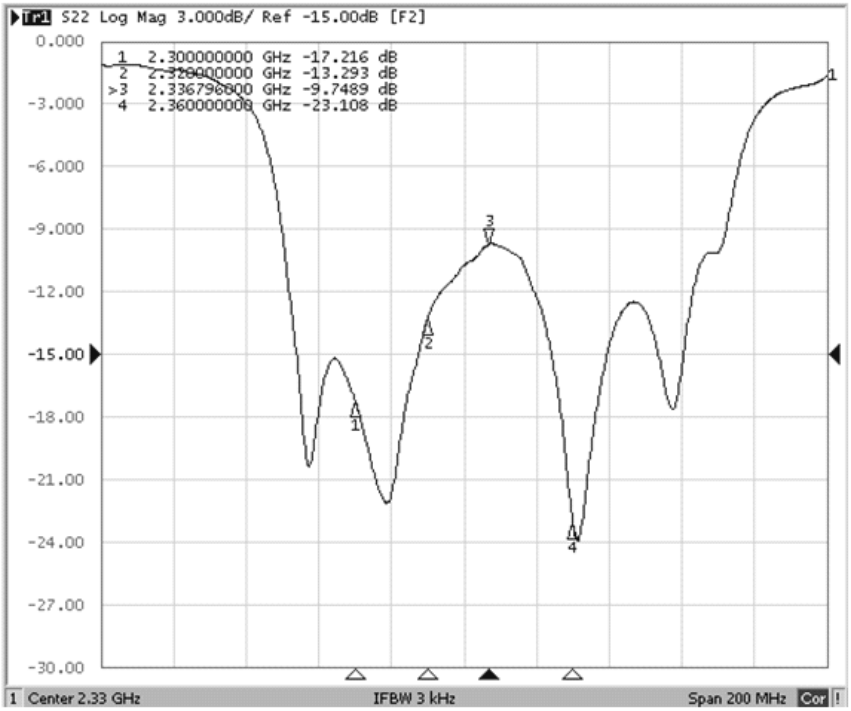


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S11



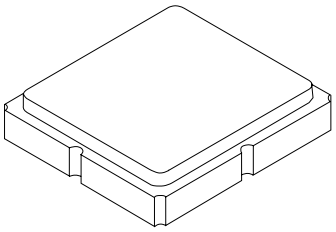
S22

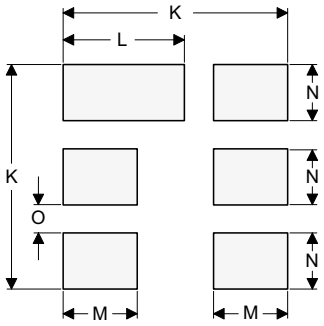


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SM3030-6 Case

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





PCB Footprint Top View

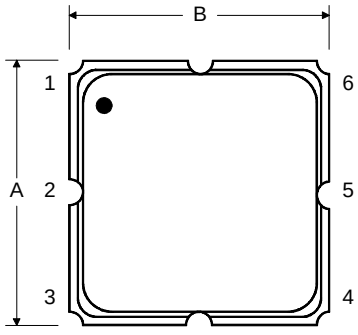
Case and PCB Footprint Dimensions

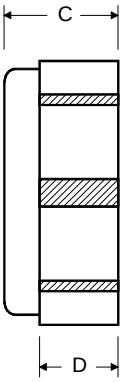
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	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

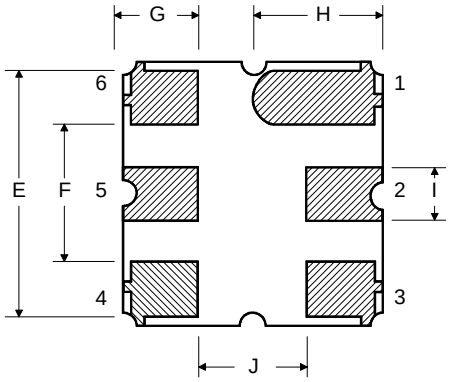
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

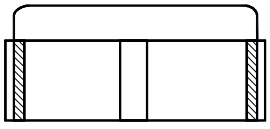
TOP VIEW





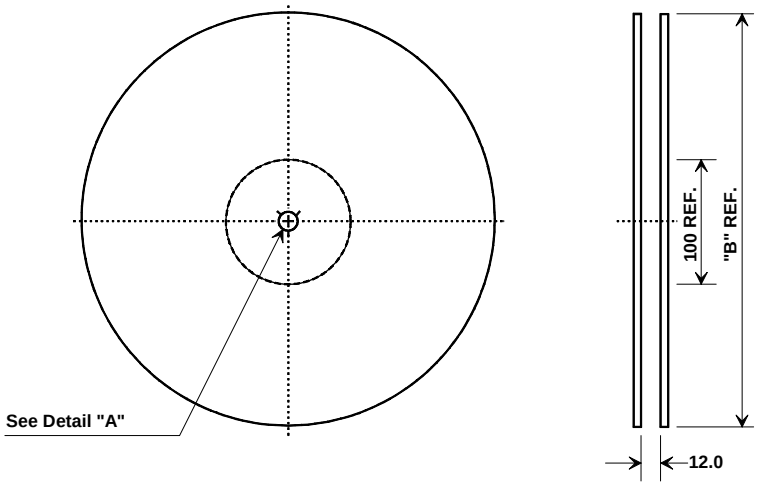
BOTTOM VIEW





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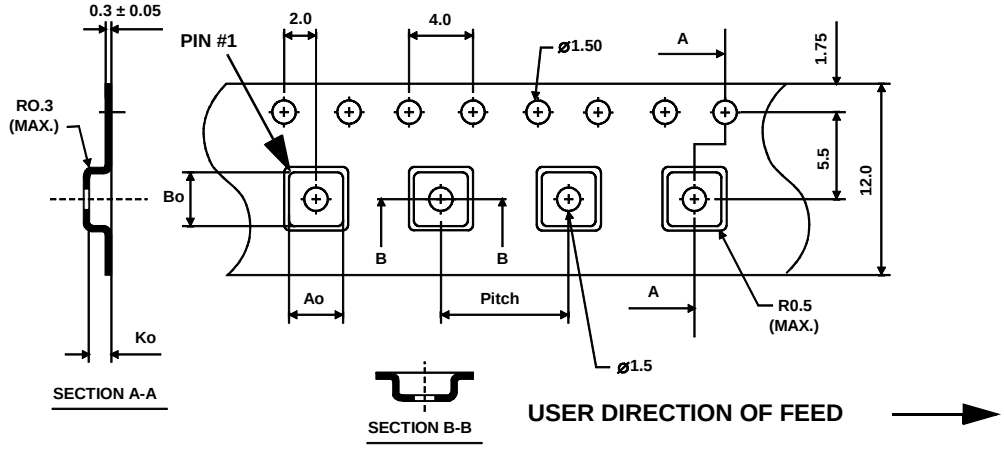
Tape and Reel Specifications



"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



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