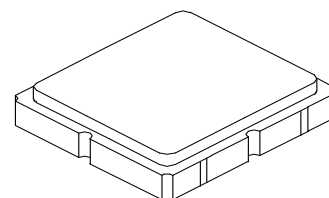


SF2372E

**2355 MHz
SAW Filter**



SM3030-6

- *Designed for RF Front-end Applications*
- *Low Insertion Loss*
- *3.0 x 3.0 x 1.3 mm Surface-mount Case*
- *No Matching Circuit Required*
- *Complies with Directive 2002/95/EC (RoHS)*
- *Moisture Sensitivity Level: 1*

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+13	dBm
DC Voltage on any Non-ground Terminal	5	Volts
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-30 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Solder Reflow Temperature - 5 Cycles Maximum	260°C for 10 seconds	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			2355		MHz
Insertion Loss, 2350 to 2360 MHz	IL			3.7	3.9	dB
Amplitude Ripple, 2350 to 2360 MHz				0.5	1.5	dB _{p-p}
Attenuation, referenced to 0 dB						dB
1850 to 1890 MHz			42	47		
2010 to 2013 MHz			35	47		
2305 to 2315 MHz			25	36		
2500 to 3600 MHz			27	41		
VSWR, 2350 to 2360 MHz				1.4	2.5	
Temperature Coefficient of Frequency				-36		ppm/k

Single-Ended Input / Output Impedance Match	No matching network required for operation at 50 ohms
Case Style	SM3030-6, 3 x 3 mm Nominal Footprint
Lid Symbolization, Y=year, WW=week, S=shift	5Z <u>YWWS</u>

Electrical Connections

Pin #	Description	Pin #	Description
1	Ground	4	Ground
2	Input	5	Output
3	Ground	6	Ground

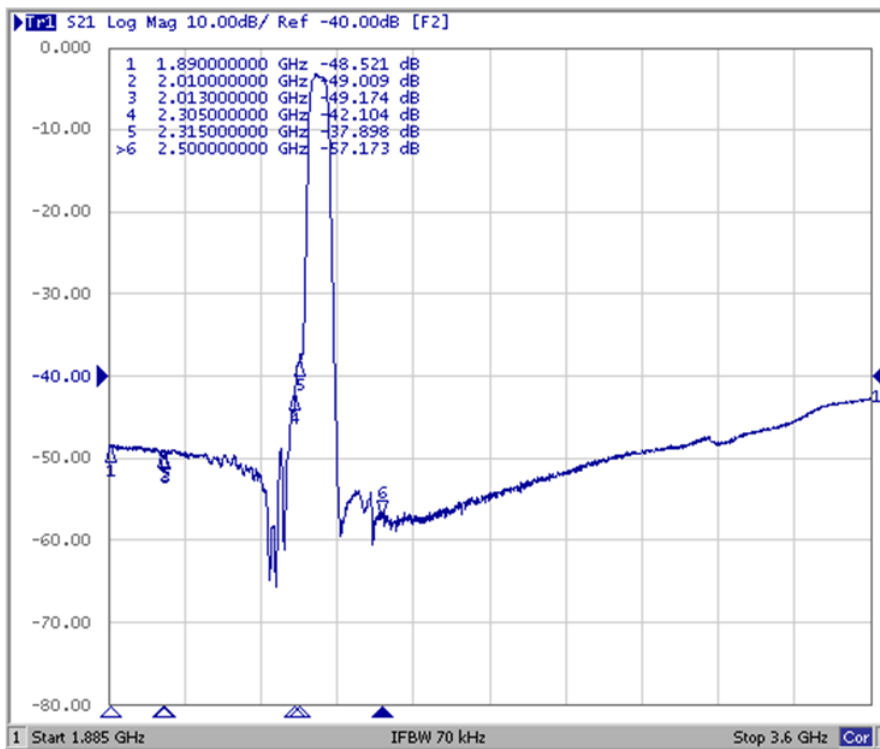
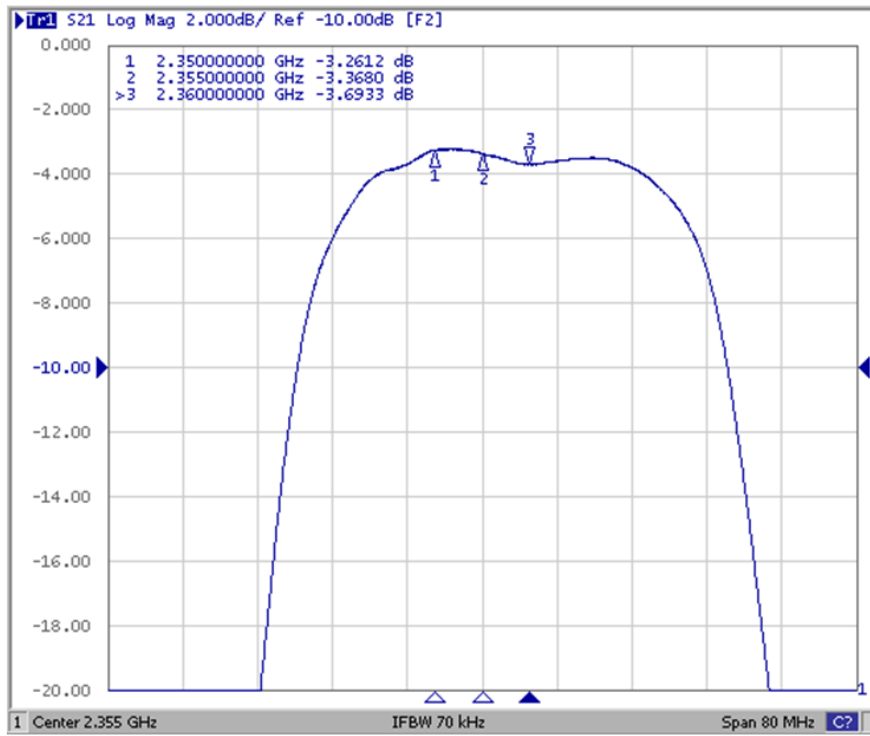


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

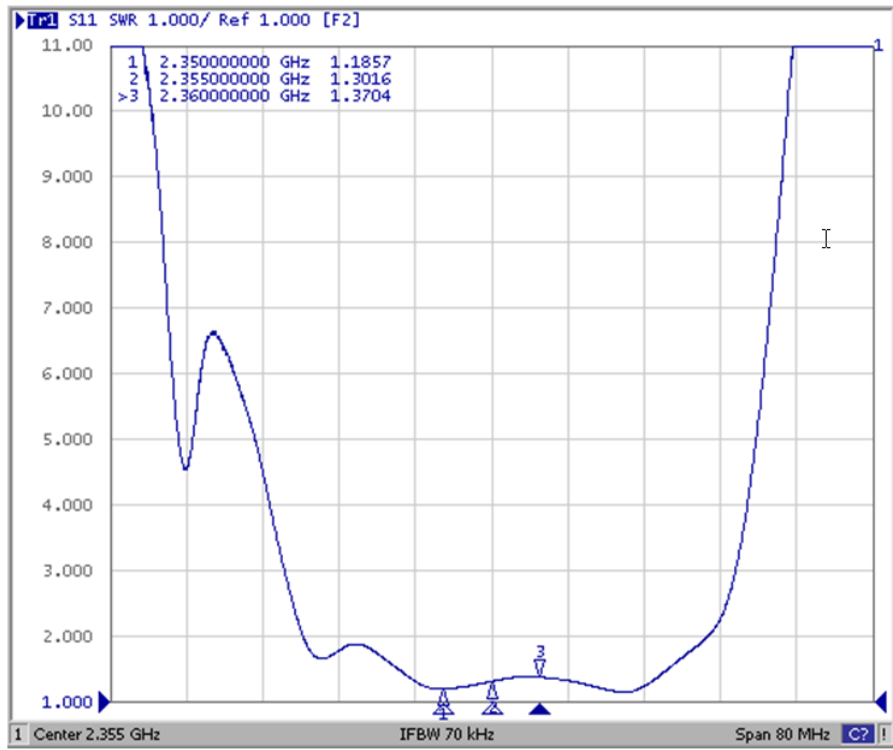
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

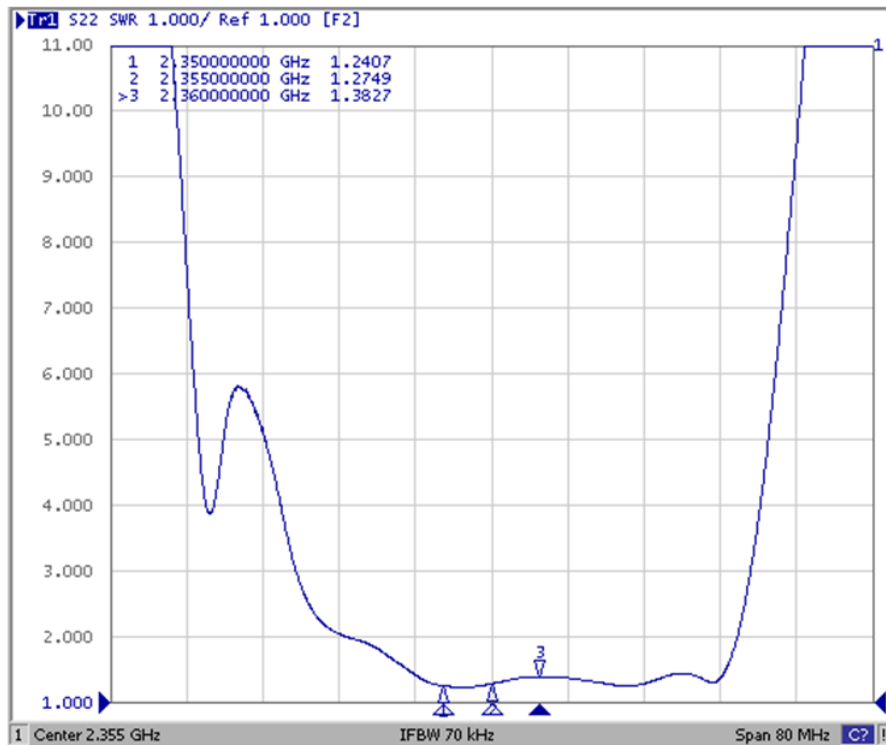


Reflection Functions:

S11

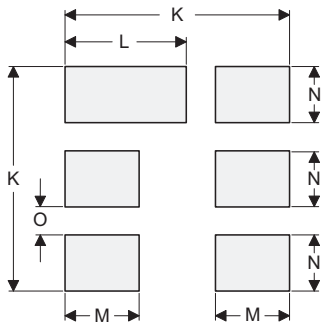
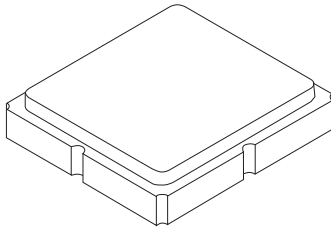


S22



SM3030-6 Case

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



PCB Footprint Top View

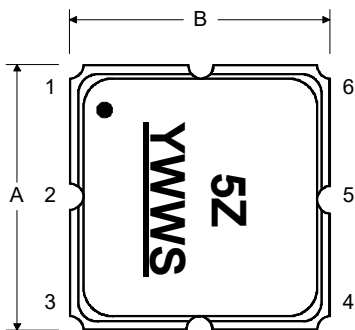
Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.99	3.00	3.01	0.117	0.118	0.118
B	2.99	3.00	3.01	0.117	0.118	0.118
C	-	-	1.40	-	-	0.055
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.35	2.50	2.65	0.092	0.110	0.104
F	1.45	1.60	1.57	0.058	0.063	0.061
G	0.70	0.85	1.00	0.027	0.033	0.039
H	1.35	1.50	1.65	0.053	0.059	0.064
I	0.45	0.60	0.75	0.017	0.024	0.017
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	

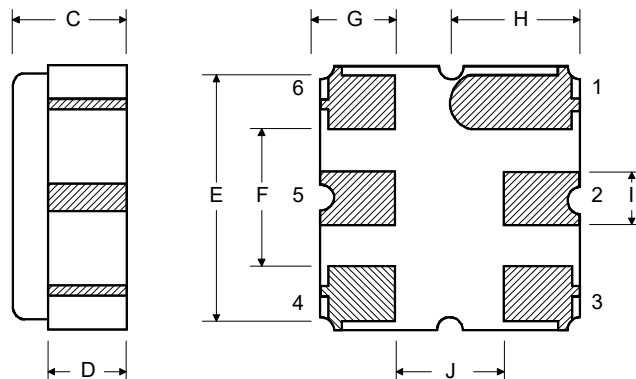
Case Materials

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

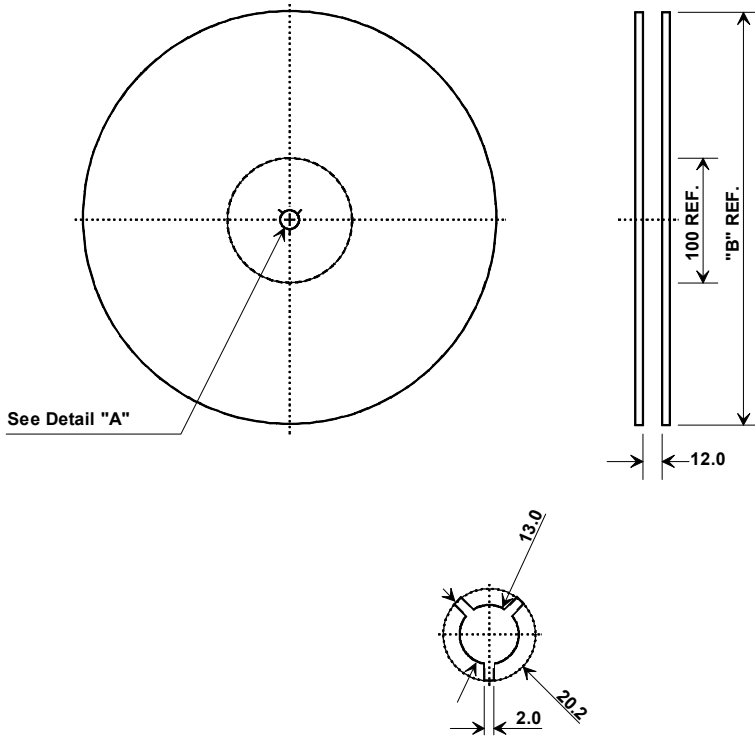


BOTTOM VIEW



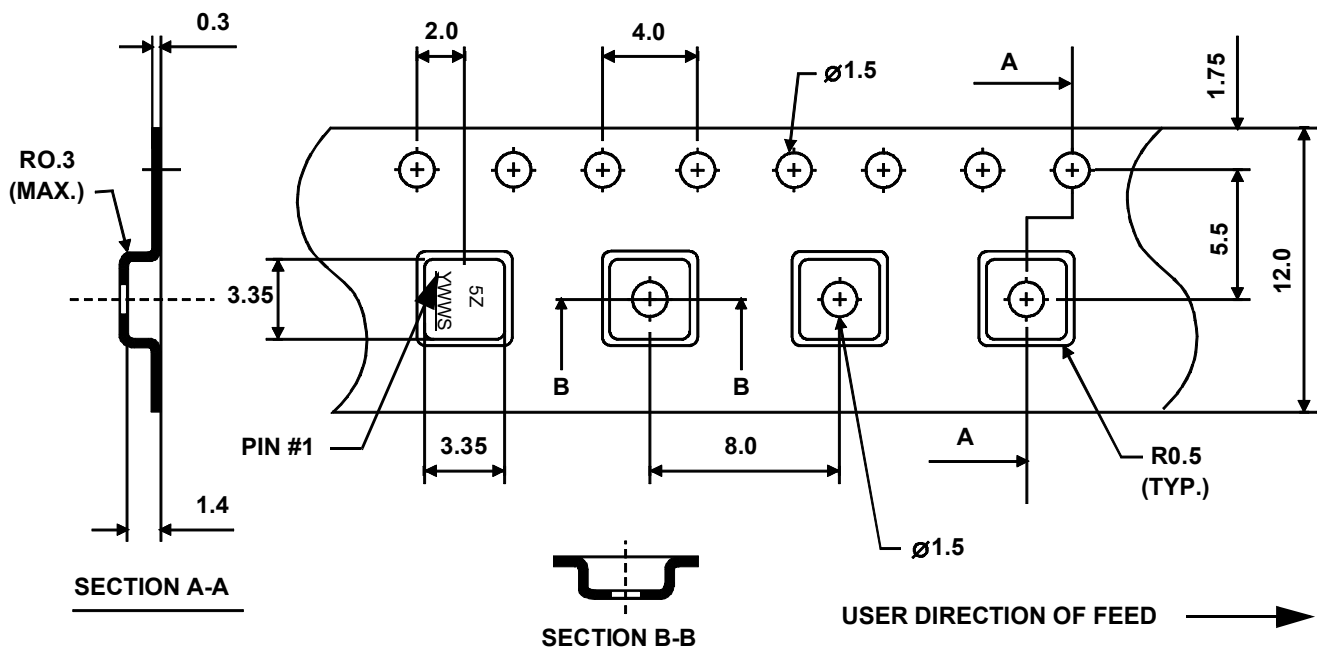
Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481



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

COMPONENT ORIENTATION



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 (10 seconds).
4. Time: 5 times maximum.

