



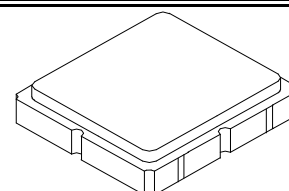
AEC-Q200
This component was always
RoHS compliant from the first
date of manufacture.

- Low-loss RF SAW Filter
- Surface-mount 3.0 x 3.0 x 1.3 mm Package
- Complies with Directive 2002/95/EC (RoHS)



SF2238E

**2560 MHz
SAW Filter**



SM3030-6

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range	-40 to +95	°C
Solder Reflow Temperature, 10 seconds, 5 cycles maximum	260	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	F _C			2560		MHz
Maximum Insertion Loss, 2545 to 2575 MHz	IL			2.4	4.0	dB
Amplitude Ripple, 2545 to 2575MHz				0.8	2.0	dB _{P-P}
VSWR, 2545 to 2575 MHz				1.3:1	2.3:1	
Attenuation Referenced to 0 dB:						
DC to 1100 MHz			37	42.5		dB
1100 to 1880 MHz			31	42.5		
1880 to 2280 MHz			43	46		
2280 to 2420 MHz			40	43.5		
2420 to 2460 MHz			30	43		
2460 to 2490 MHz			10	23		
2635 to 2655 MHz			20	45		
2655 to 3100 MHz			41	45		
3100 to 4000 MHz			29	37		
Source Impedance	Z _S			50		Ω
Load Impedance	Z _L			50		
Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	972, YWWS					
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel				
	Reel Size 13 Inch	3000 Pieces/Reel				

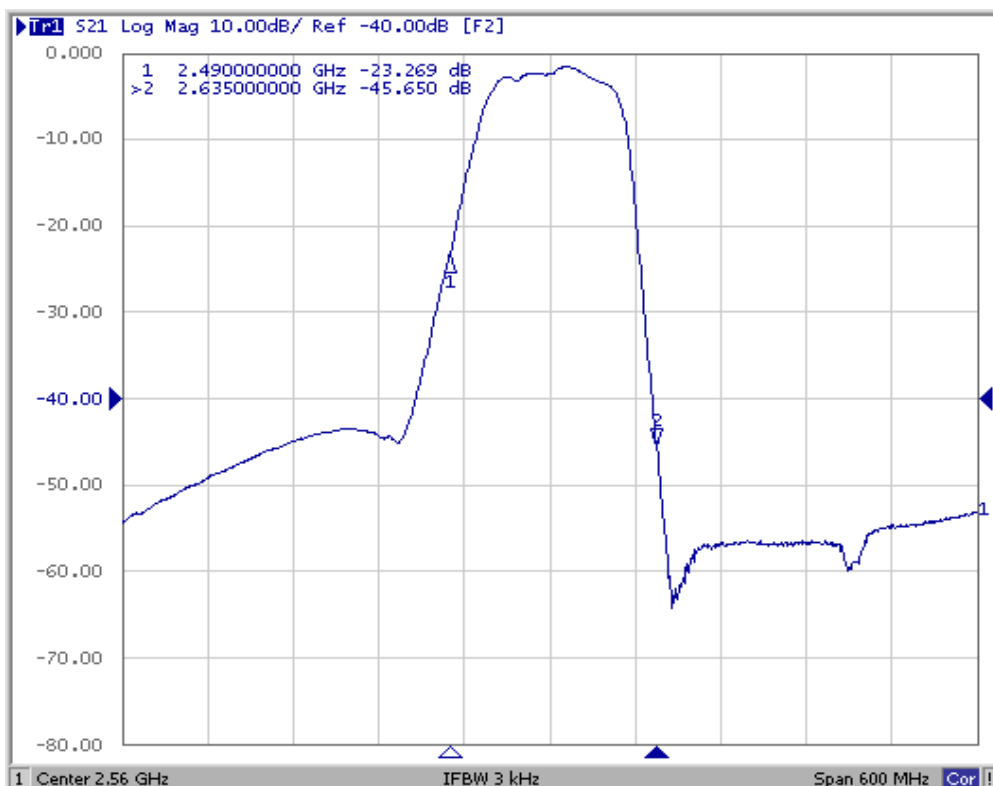
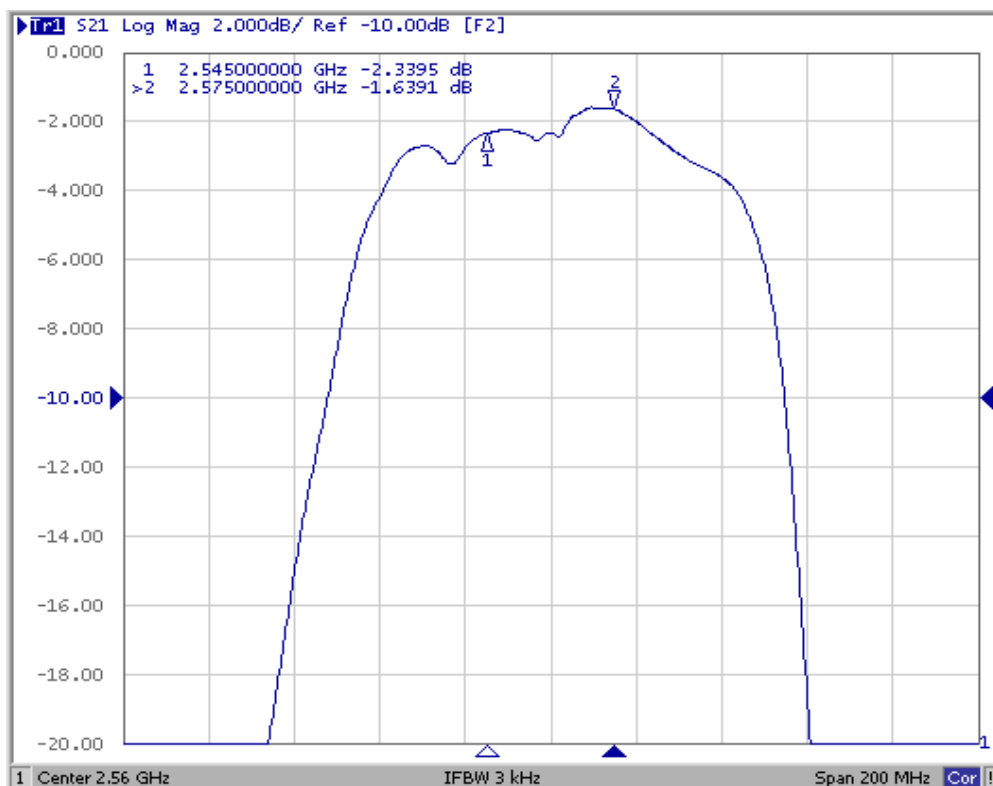


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

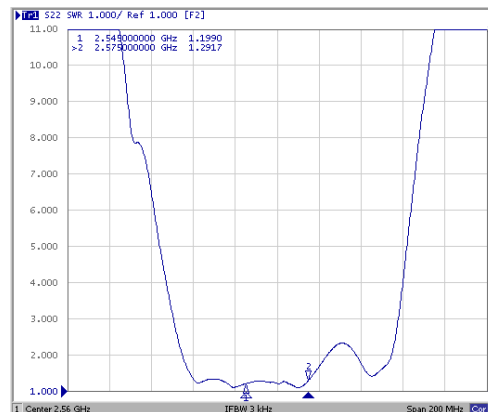
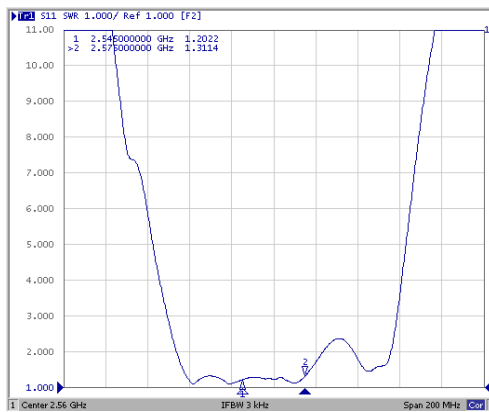
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Filter Response Plots

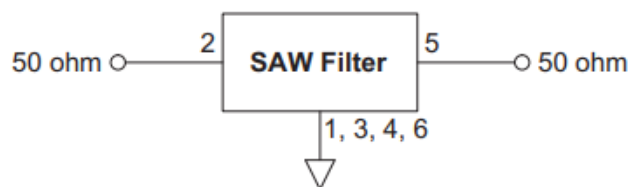




Input/Output VSWR Plots



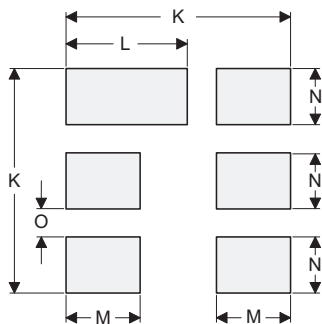
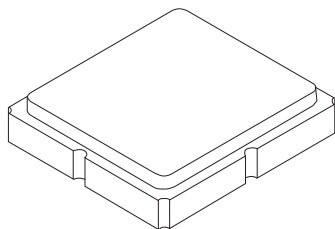
Filter Test Circuit



Connection	Terminals
Input	2
Output	5
Ground	All Others

SM3030-6 Case

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



PCB Footprint Top View

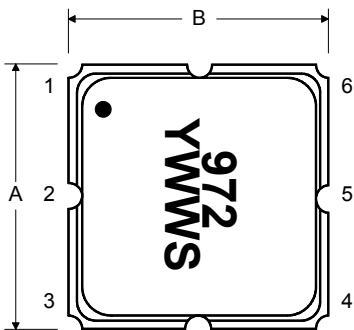
Case and PCB Footprint Dimensions

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	

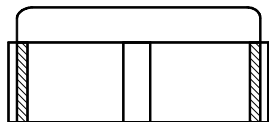
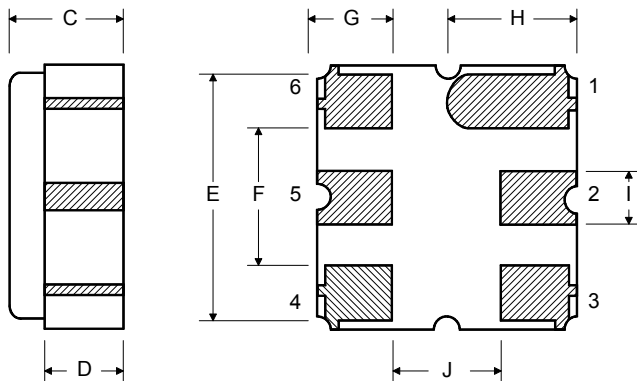
Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 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
Pb Free	

TOP VIEW



BOTTOM VIEW



See Detail "A"

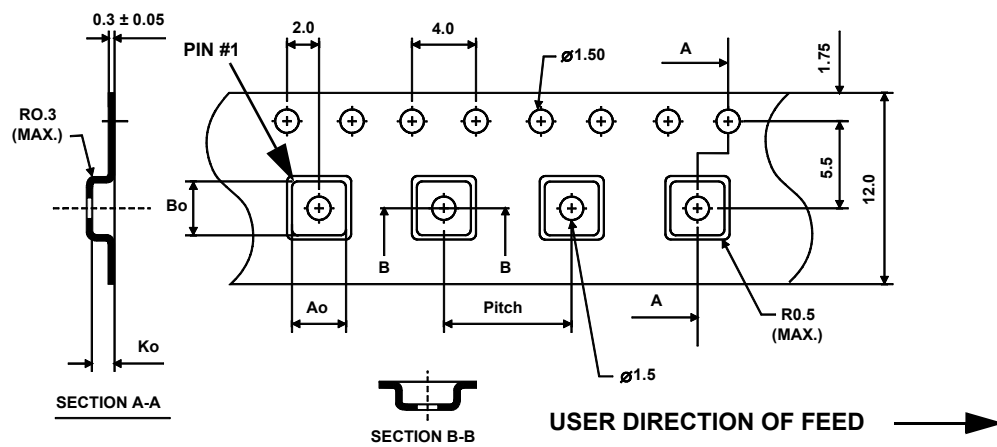
100 REF.
"B" REF.

12.0

The drawing shows a circular component with a central hole. A vertical section view is shown to the right, indicating a thickness of 12.0. The section view shows two parallel lines representing the top and bottom surfaces, with a dimension of 100 REF. and a label "B" REF. indicating a reference dimension. A callout line points from the text "See Detail 'A'" to the central hole.

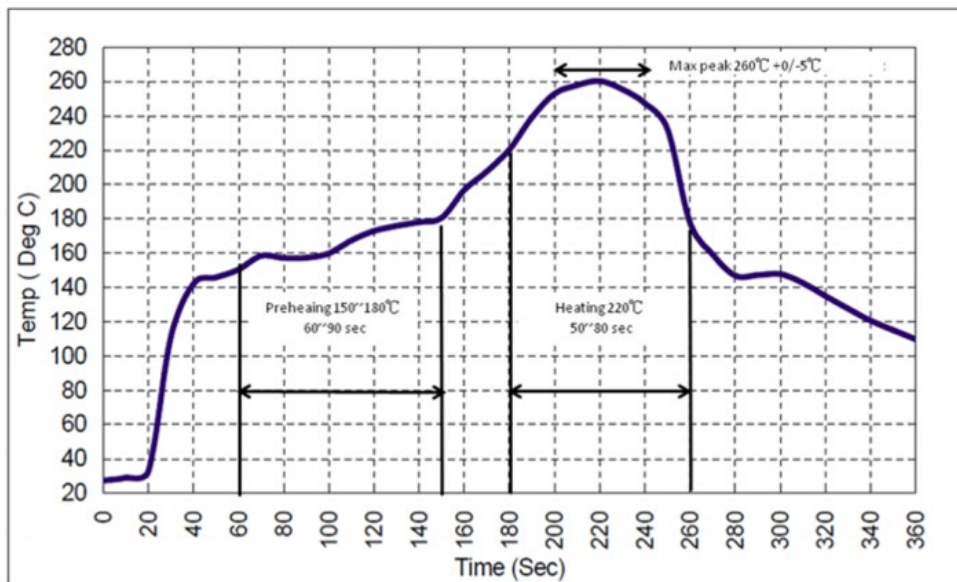
Technical drawing of a circular part. The drawing shows a cross-section of a circular component with a central hole. The outer diameter is labeled as 20.2. The inner diameter of the central hole is labeled as 13.0. The thickness of the part is labeled as 2.0. The drawing includes a center line and a section line.

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°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.



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