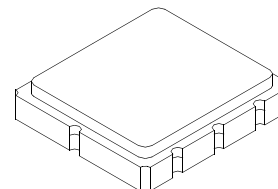


SF2394C

**440.0 MHz
SAW Filter**



SM5050-8

- **High Performance SAW Filter**
- **5 x 5 mm Surface-mount Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage Between any Two Active Terminals	3	VDC
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260 °C for 30 s	

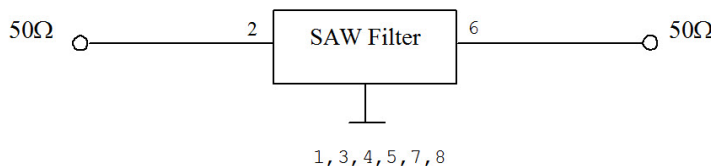
Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_C			440.0		MHz
Minimum Insertion Loss	IL_{MIN}			1.4	2.8	dB
3 dB Bandwidth	BW_{-3dB}		19	23.3		MHz
Attenuation referenced to 0dB						dB
$F_C -45$ to $F_C -100$ MHz			40	57		
$F_C +45$ to $F_C +55$ MHz			30	56		
$F_C +55$ to $F_C +100$ MHz			40	56		
Temperature Coefficient of Frequency				-36		ppm/k
Source Impedance Z_S				50		Ω
Load Impedance Z_L				50		

Case Style	5 x 5 mm Nominal Footprint	
Lid Symbolization, Y=year, WW=week, S=shift, Dot=pin 1 indicator	B34, YWWS	
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel
	Reel Size 13 Inch	3000 Pieces/Reel

Electrical Connections

Connection	Terminals
Input	2
Output	6
Case Ground	All others

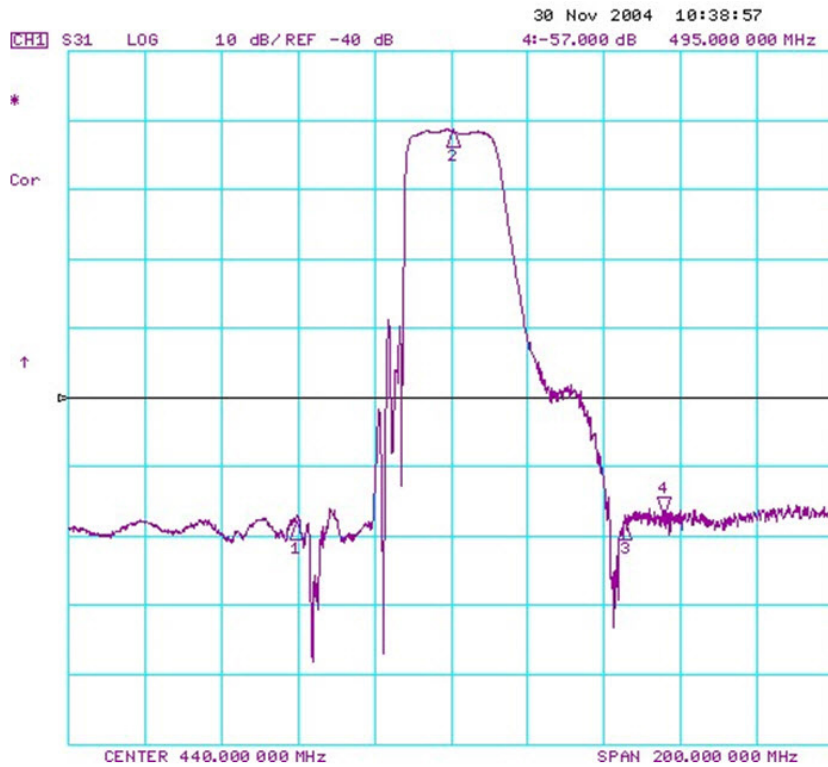
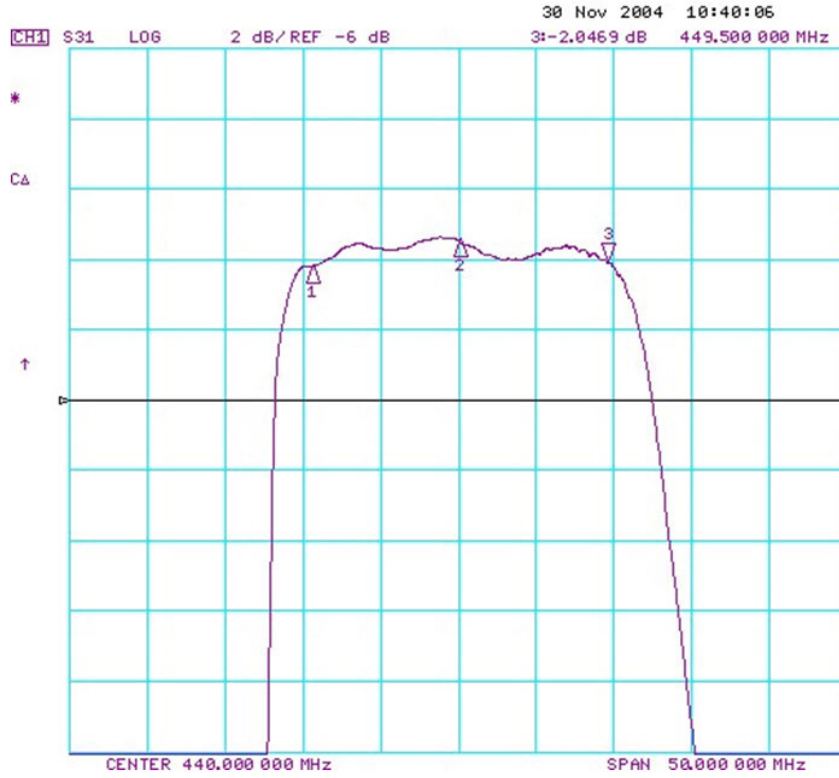


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

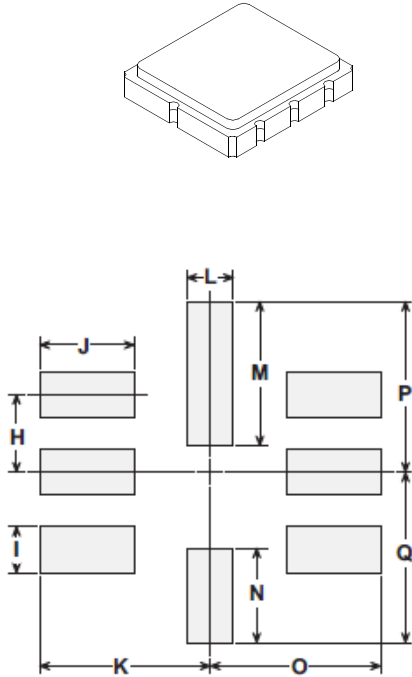
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics



SM5050-8 Case

8-Terminal Ceramic Surface-Mount Case 5.0 X 5.0 mm Nominal Footprint



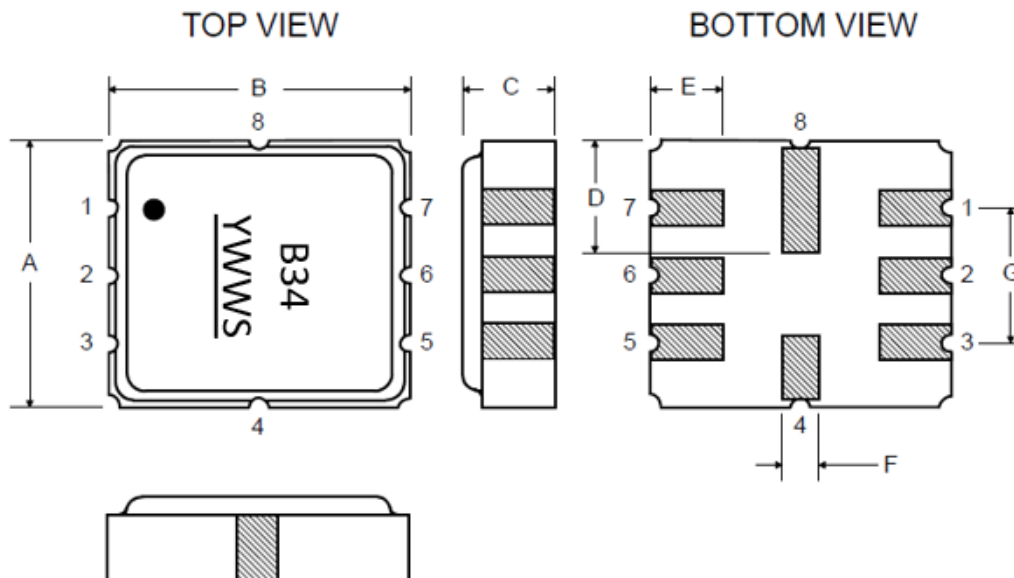
PCB Footprint

Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.80	5.00	5.20	0.189	0.197	0.205
B	4.80	5.00	5.20	0.189	0.197	0.205
C	1.30	1.50	1.70	0.050	0.060	0.067
D	1.98	2.08	2.18	0.078	0.082	0.086
E	1.07	1.17	1.27	0.042	0.046	0.050
F	0.50	0.64	0.70	0.020	0.025	0.028
G	2.39	2.54	2.69	0.094	0.100	0.106
H	-	1.27	-	-	0.050	-
I	-	0.76	-	-	0.029	-
J	-	1.47	-	-	0.057	-
K	-	2.60	-	-	0.102	-
L	-	0.84	-	-	0.033	-
M	-	2.28	-	-	0.089	-
N	-	1.47	-	-	0.057	-
O	-	2.60	-	-	0.102	-
P	-	2.60	-	-	0.102	-
Q	-	2.60	-	-	0.102	-

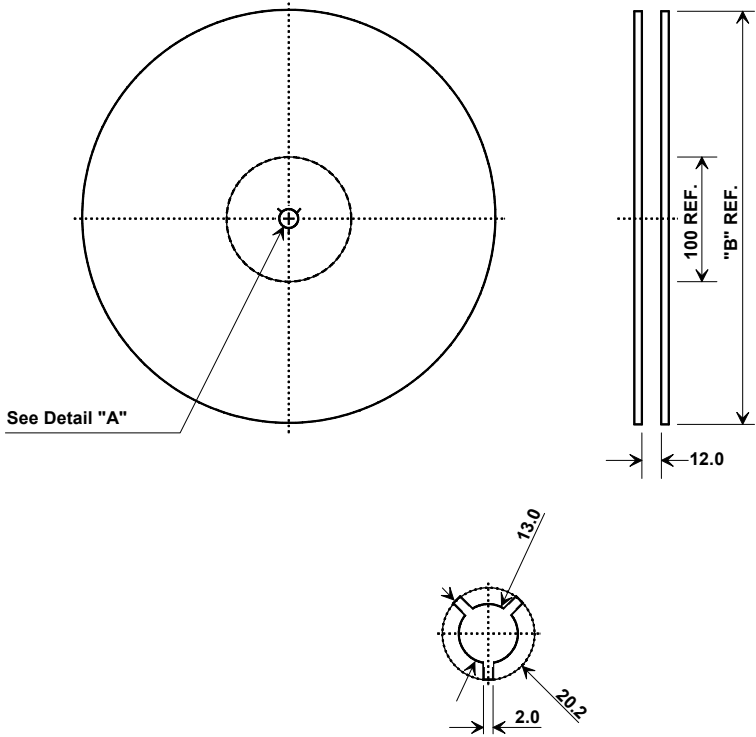
Case Materials

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



Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

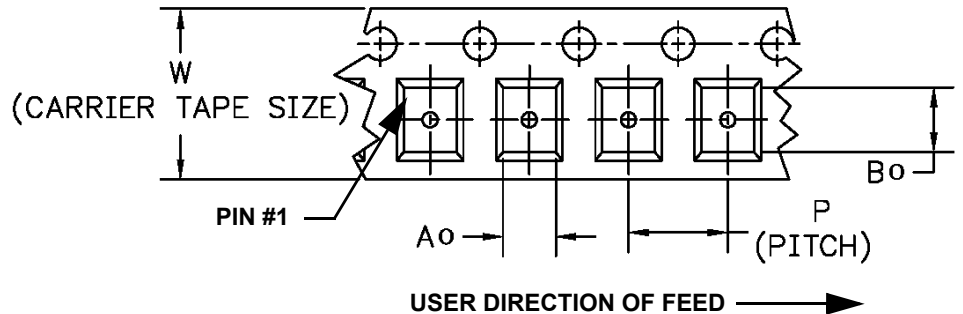
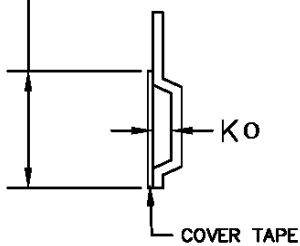


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.1 mm
Bo	5.1 mm
Ko	1.8 mm
Pitch	8.0 mm
W	12.0 mm

COVER TAPE SIZE



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.

