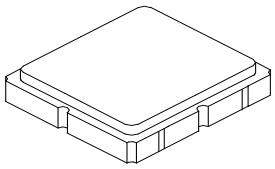
AEC-Q200
This component was always RoHS compliant from the first date of manufacture.

SF2349D

912.1 MHz SAW Filter

- ***912.1 MHz RF SAW Filter***
- ***3.8 x 3.8 x 1.25 mm Surface-mount Package***
- ***Complies with Directive 2002/95/EC (RoHS)***



SM3838-6

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power Level	+10	dBm
Maximum DC Voltage Between any Two Terminals	5	VDC
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-20 to +65	°C
Storage Temperature Range	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260°C for 30 s	

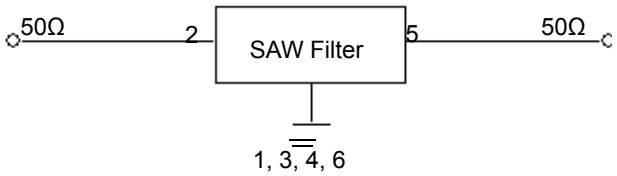
Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C	1		912.1		MHz
Insertion Loss, 907.0 to 917.2 MHz	IL			2.95	4.1	dB
Amplitude Ripple 907.0 to 917.2 MHz				0.5	1.8	
Rejection Referenced to 0 dB:		1, 2, 3				dB
10 to 830 MHz			40	48		
830 to 890 MHz			30	41		
890 to 894 MHz			15			
930 to 960 MHz			14	27		
960 to 1200 MHz			40	46		
Single-ended Source Impedance	50 ohm					
Single-ended Load Impedance	50 ohm					

Case Style	SM3838-6 3.8 x 3.8 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	B17, YWWS
Standard Reel Quantity Reel Size 7 Inch	1000 Pieces/Reel
Reel Size 13 Inch	3000 Pieces/Reel

Electrical Connections

Connection	Terminals
Port 1	2
Port 2	5
Case Ground	All others

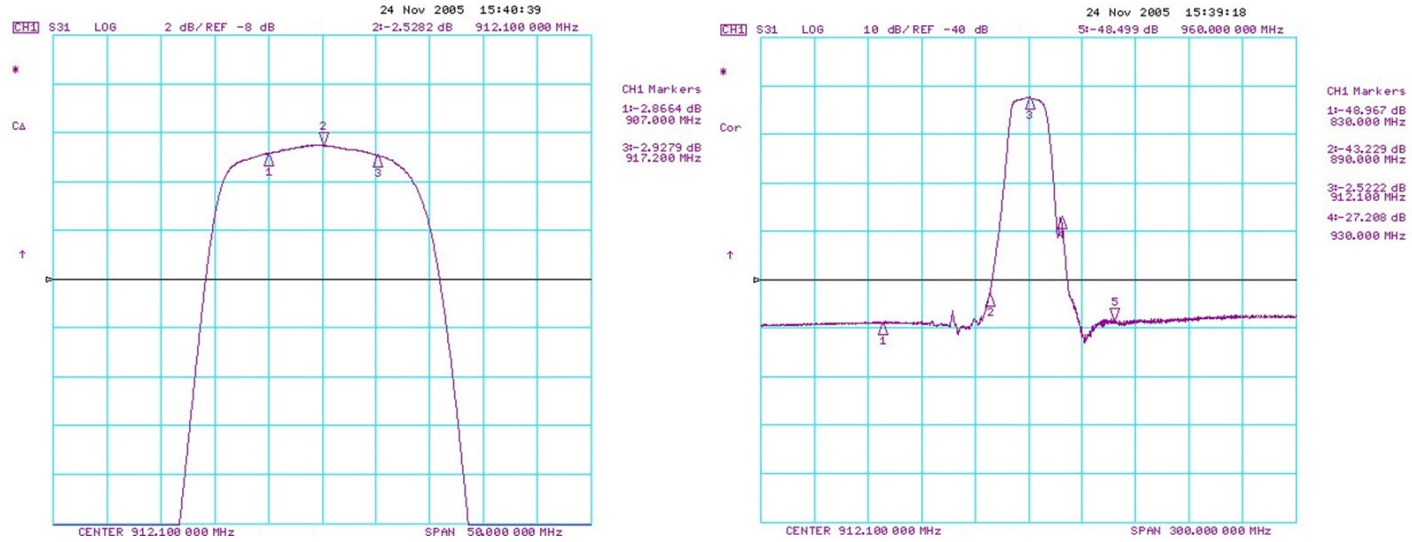


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

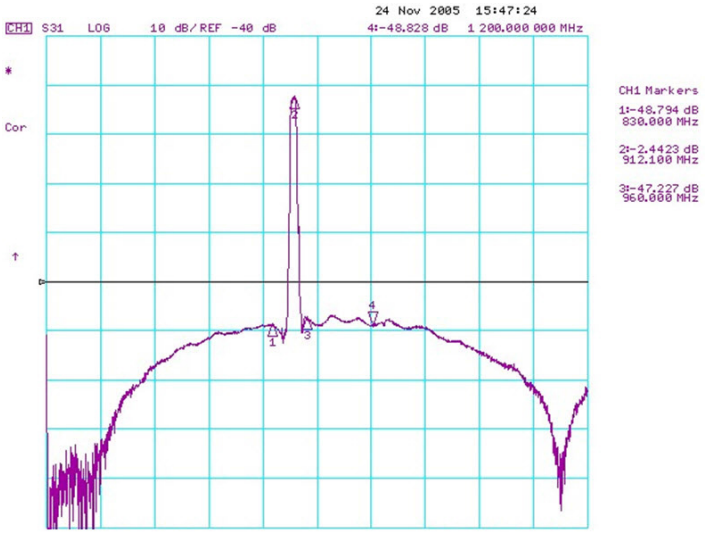
NOTES:

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

Transfer Function



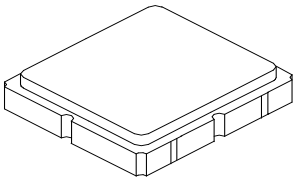
Wideband

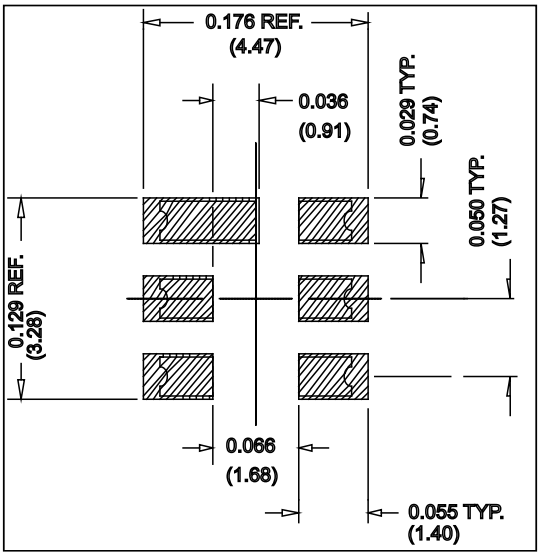


SM3838-6 Case

6-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint





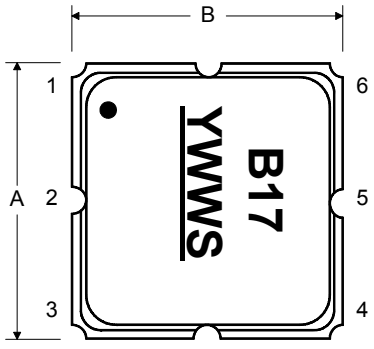
PCB Footprint

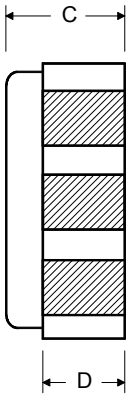
Case Dimensions						
Dimension	**mm**			**Inches**		
	Min	**Nom**	**Max**	**Min**	**Nom**	**Max**
A	3.60	3.80	4.0	0.14	0.15	0.16
B	3.60	3.80	4.0	0.14	0.15	0.16
C	1.30	1.50	1.70	0.05	0.06	0.067
D	0.95	1.10	1.25	0.037	0.043	0.05
E	2.39	2.54	2.69	0.090	0.10	0.110
G	0.90	1.0	1.10	0.035	0.04	0.043
H	1.90	2.0	2.10	0.75	0.08	0.83
I	0.50	0.6	0.70	0.020	0.024	0.028
J	1.70	1.8	1.90	0.067	0.07	0.075

Electrical Connections		
Connection		**Terminals**
Port 1	Single-ended Input	2
Port 2	Single-ended Output	5
	Ground	All others
Single-ended Operation Only		
Dot indicates Pin 1		

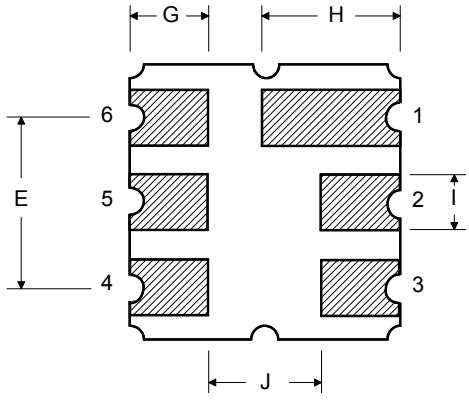
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

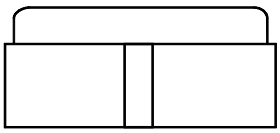
TOP VIEW





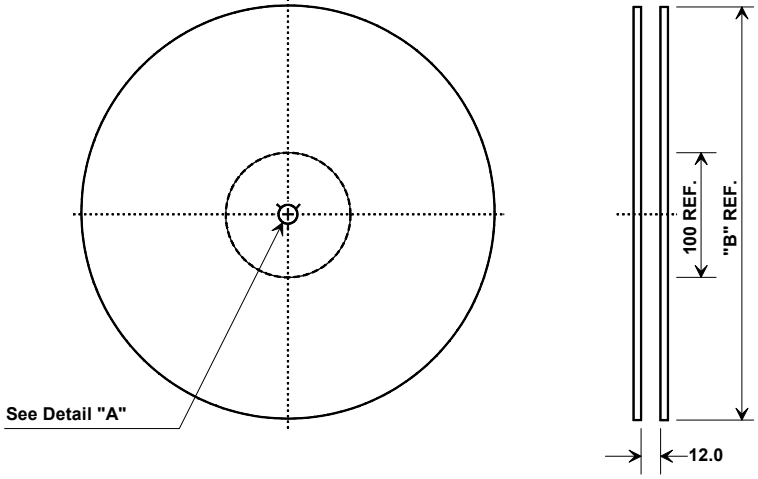
BOTTOM VIEW



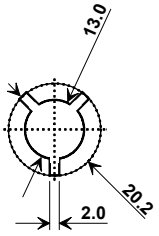


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

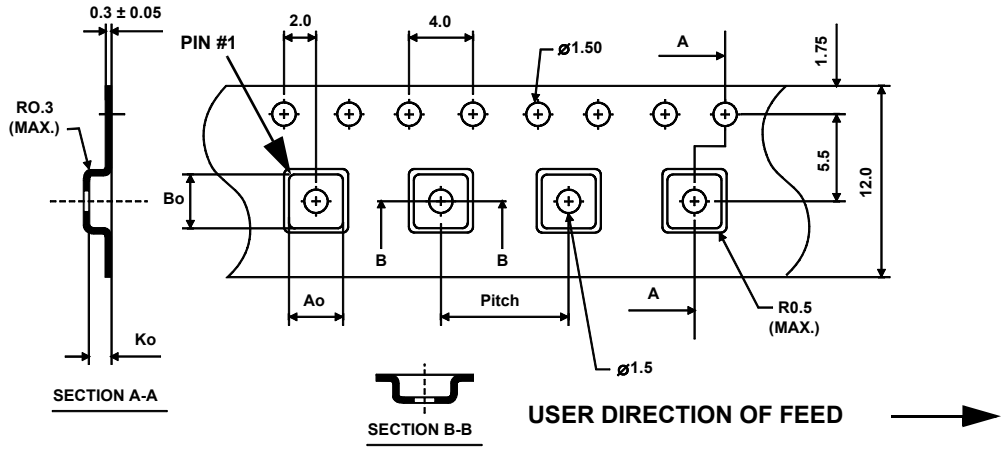


"B " Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180ºC for 60~90 seconds.
2. Ascending time to preheating temperature 150ºC shall be 30 seconds min.
3. Heating shall be fixed at 220ºC for 50~80 seconds and at 260ºC +0/-5ºC peak (10 seconds).
4. Time: 5 times maximum.