RFMi
A BRAND OF AKOUSTIS

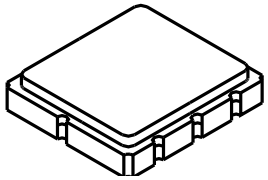
Preliminary

RoHS compliant

SF2346D

924.375 MHz SAW Filter

- ***Designed for Front End GPS Applications***
- ***Steep Rejection***
- ***3.8 x 3.8 x 1.2 mm Surface-Mount Case***
- ***No Matching Circuit Required***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***Moisture Sensitivity Level: 1***
- ***AEC-Q200 Qualified***



SM3838-8

Absolute Maximum Ratings

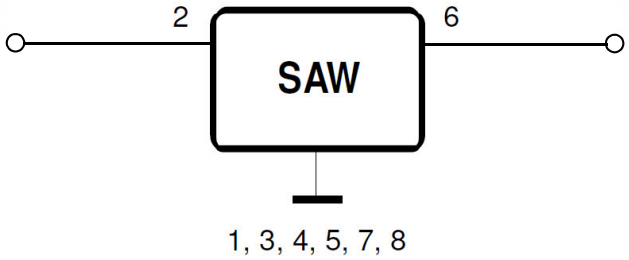
Rating	Value	Units
Maximum Input Power	+20	dBm
Maximum DC Voltage On any Non-ground Terminal	0	VDC
Storage Temperature Range	-40 to +85	°C
Operating Temperature Range	0 to +40	°C
Maximum Soldering Profile (5 cycles maximum)	265 °C for 10 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			924.375		MHz
Insertion Loss (920.925 to 927.825 MHz)	IL			2.5	3	dB
1dB Bandwidth (			7	10		MHz
Amplitude Ripple, (920.925 to 927.825 MHz)				0.6	1.0	dB
Attenuation relative to IL						dB
10 to 914.8 MHz			7	12		
940 to 1500 MHz			30	35		
VSWR (920.925 to 927.825 MHz)			1.9	2.2		
Ambient Temperature				25		
Source impedance	Z_S			50		Ω
Load impedance	Z_L			50		Ω

Case Style	SMD 3.8 x 3.8
Lid Symbolization: Y = Year, WW = Week, S = Shift)	B30,YWWS

Connection	Terminal
Input	2
Output	6
Ground	All others



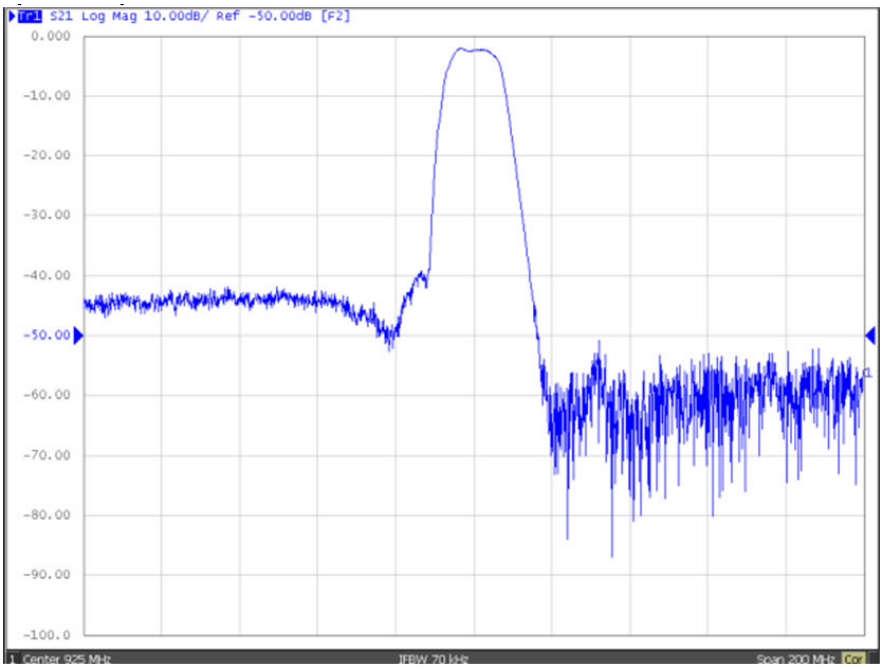
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

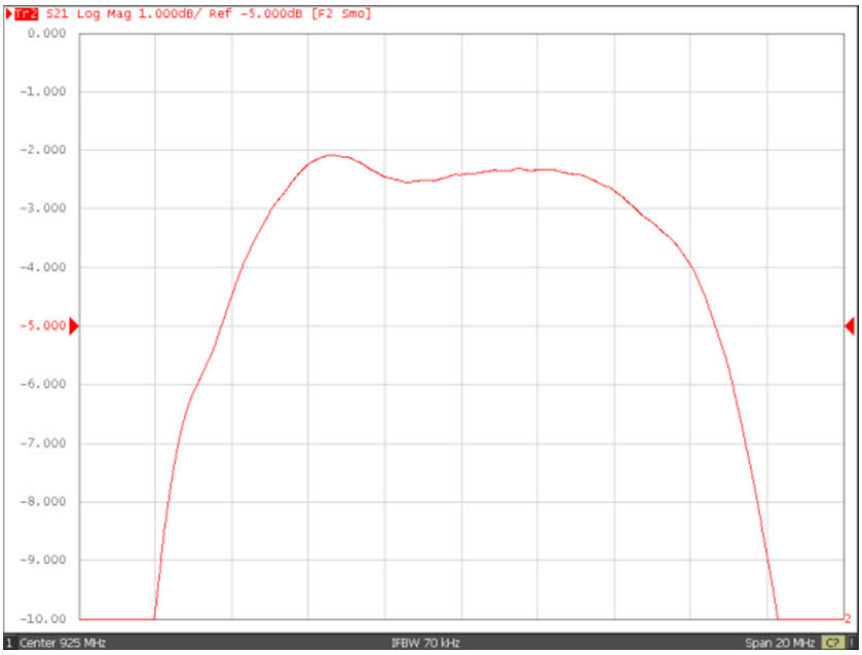
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

S21 Response: Span - 200 MHz

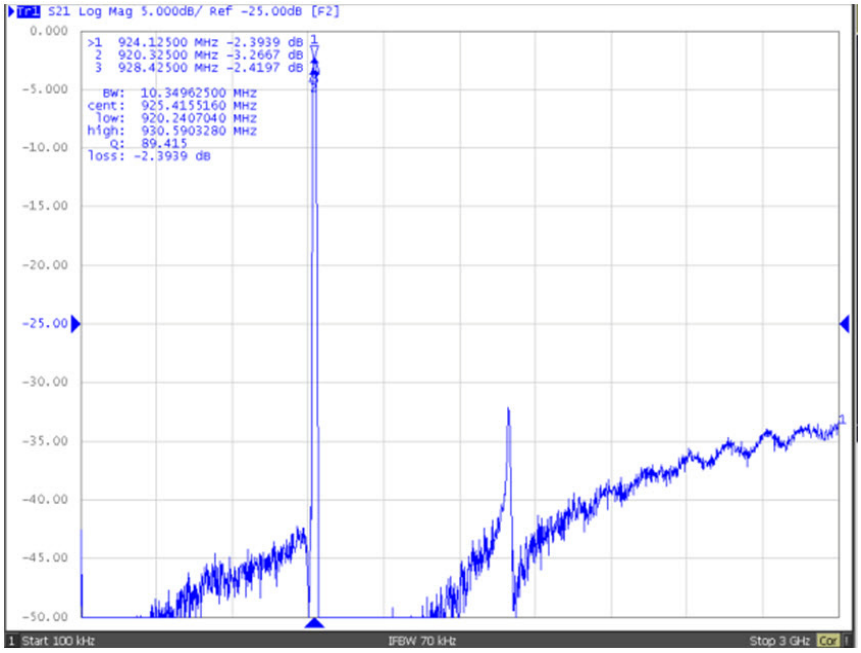


S21 Response: Span - 20 MHz

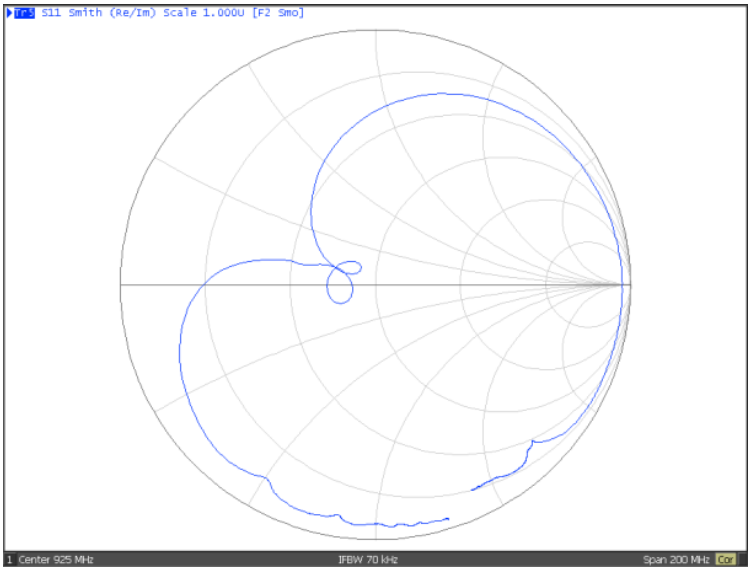


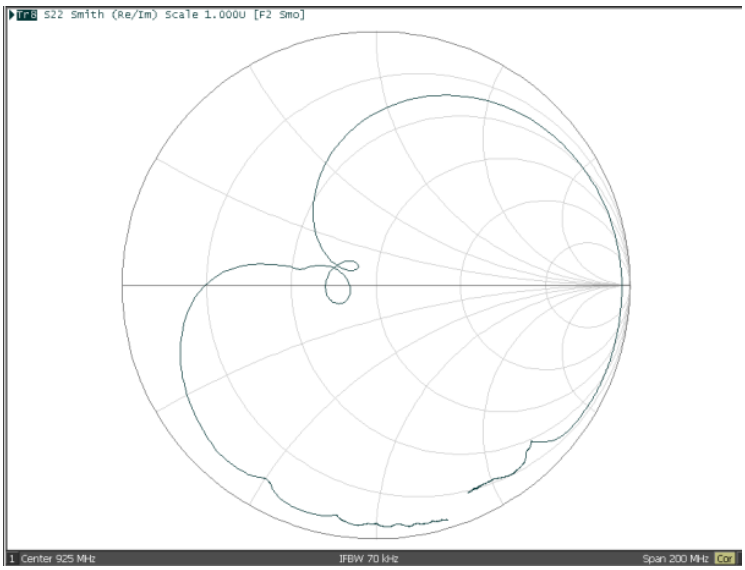
Frequency Characteristics

S21 Response: Span - 100 KHz - 3 GHz



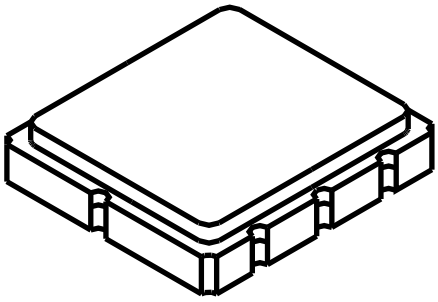
S11/S22 Response

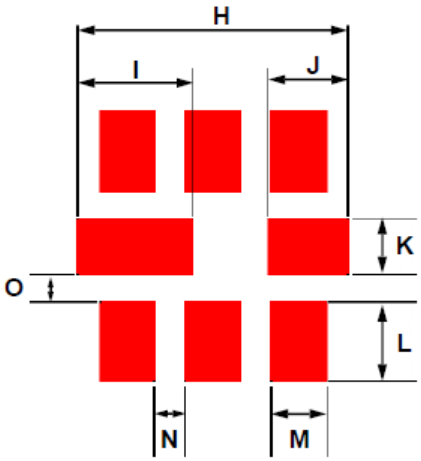




SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case
3.8 X 3.8 mm Nominal Footprint





PCB Footprint

Case and PCB Footprint Dimensions

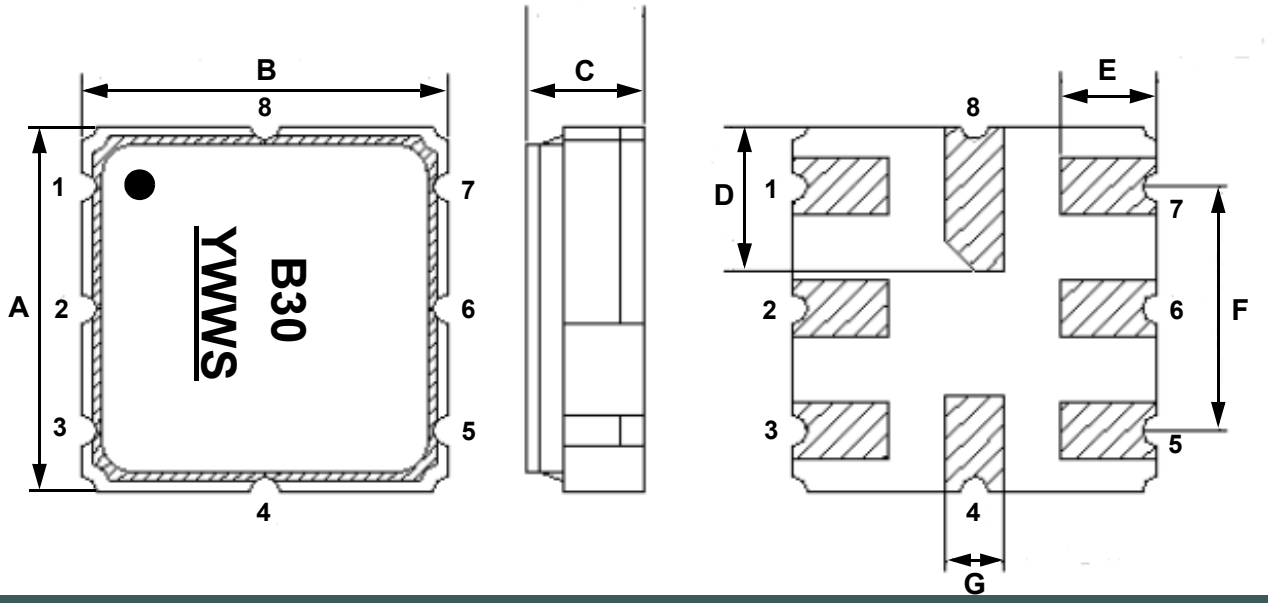
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.65	3.80	3.95	0.142	0.150	0.157
B	3.65	3.80	3.95	0.142	0.150	0.157
C	-	-	1.40	-	-	0.047
D	-	1.50	-	-	0.059	-
E	-	1.00	-	-	0.039	-
F	-	2.54	-	-	0.100	-
G	-	0.60	-	-	0.023	-
H	-	4.01	-	-	0.157	-
I	-	1.70	-	-	0.066	-
J	-	1.19	-	-	0.046	-
K	-	0.81	-	-	0.031	-
L	-	1.19	-	-	0.046	-
M	-	0.81	-	-	0.031	-
N	-	0.46	-	-	0.018	-
O	-	0.41	-		0.016	-

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

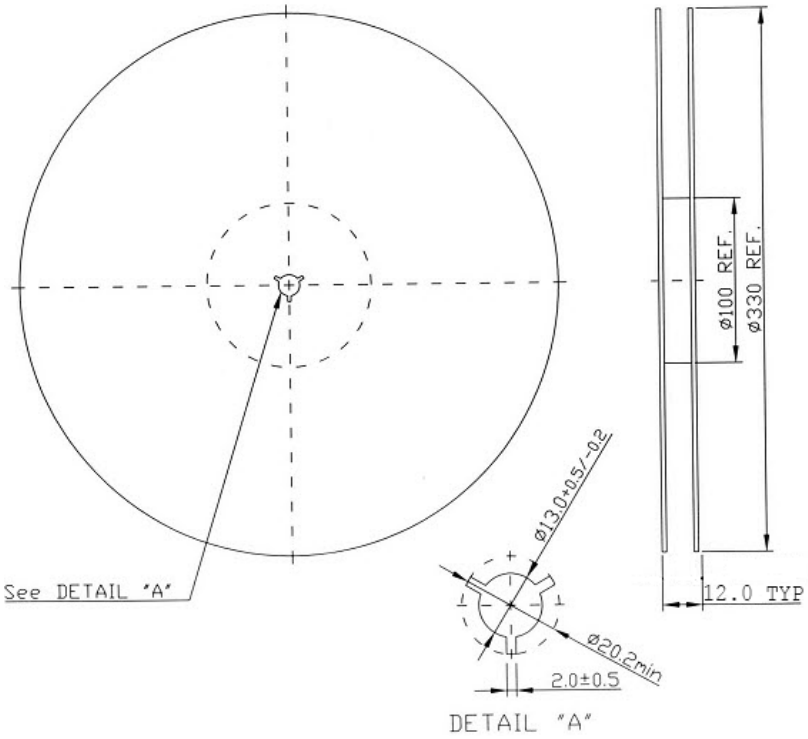
BOTTOM VIEW



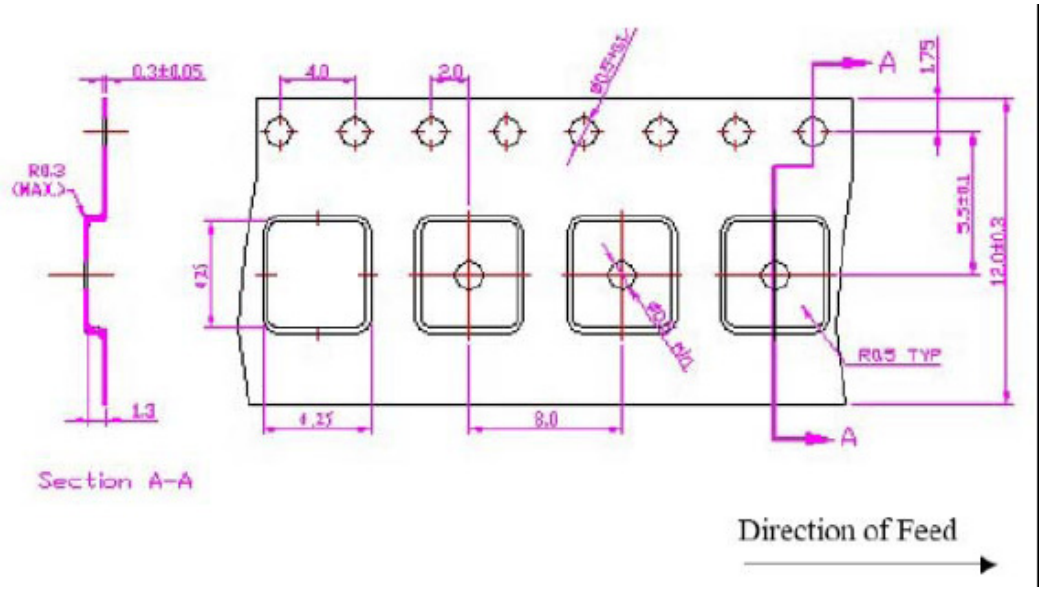
Reel Dimension

Reel Count:
7" = 500
13" = 3000

Tape and Reel Standard per ANSI/EIA-481



Tape Dimension



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.