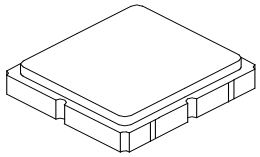
RFMi
A BRAND OF AKOUSTIS

Preliminary

RoHS compliant

SF2386E

753 MHz
SAW Notch Filter



SM3030-8

- ***RF Filter for Mobile Communication Applications***
- ***Low Insertion Loss***
- ***3.0 x 3.0 x 1.3 mm Surface-Mount Case***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***Moisture Sensitivity Level: 1***
- ***AEC-Q200 Qualified***

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+15	dBm
DC Voltage	5	VDC
Storage Temperature Range	-40 to +85	°C
Operating Temperature	-40 to +85	°C
Terminating Source Impedance (single)	Z_S= 50	Ω
Terminating Load Impedance (single)	Z_L= 50	Ω
Maximum Soldering Profile	260 °C for 10 s	

Characteristic	Sym	Min	Typ	Max	Units
Nominal Center Frequency	F_C		753		MHz
Minimum Insertion Attenuation (400 to 600 MHz)	α min		4	5	dB
Minimum Insertion Attenuation (600 to 694 MHz)			5	6	
Attenuation	dB				dB
703 to 748 MHz		9	12		
758 to 803 MHz		12	14		
1710 to 1980 MHz		40	45		

Case Style	SM3030-8 3 x 3 mm Nominal Footprint
Lid Symbolization (YY=year, WW=week, S=shift)	6T YWWS

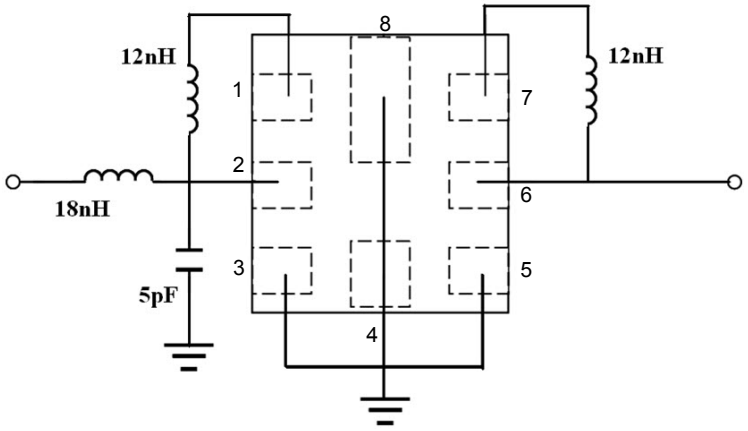
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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.

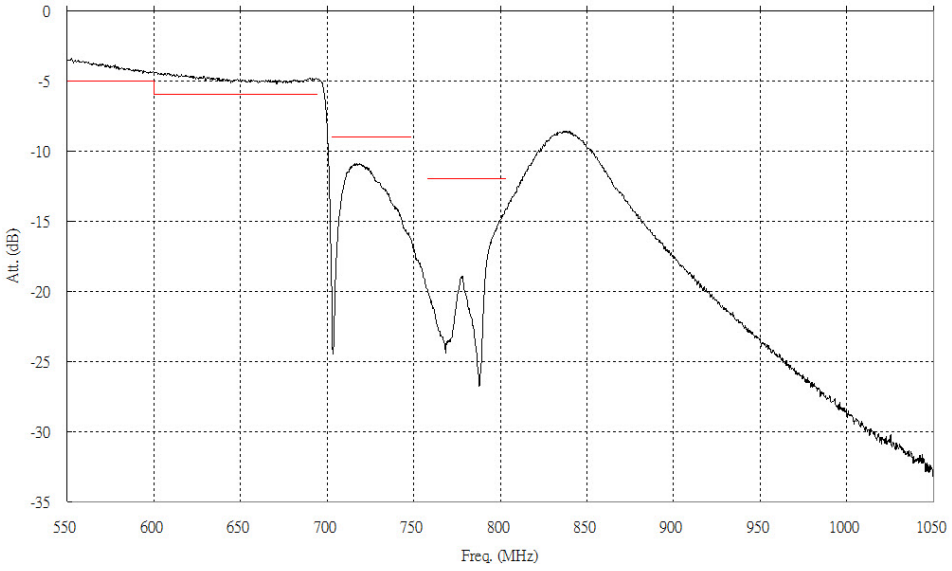
Electrical Connections

Connection	Terminals
Input	2
Output	6
Matching Port	1, 7
Ground	All others

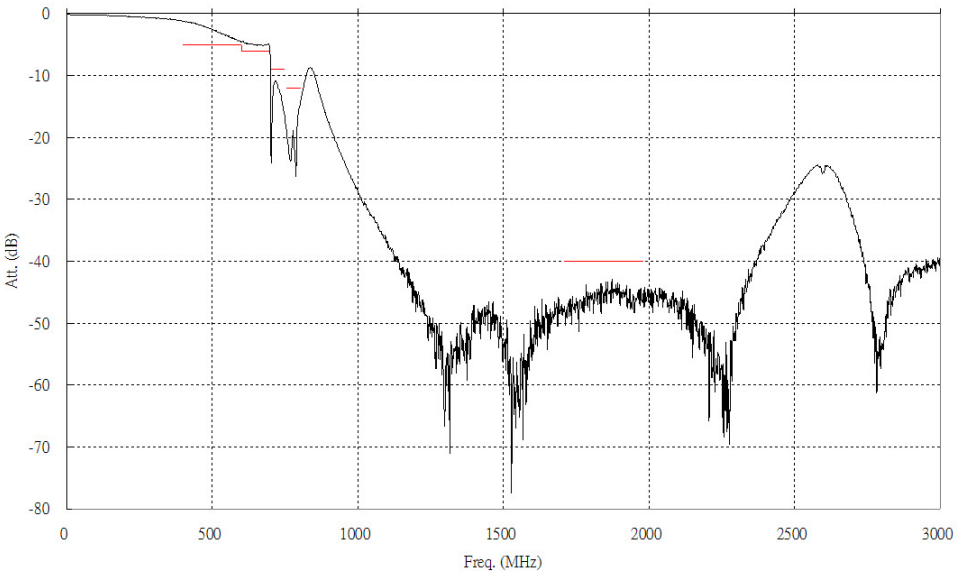


Frequency Characteristics

S21 Response: (Span 500 MHz)

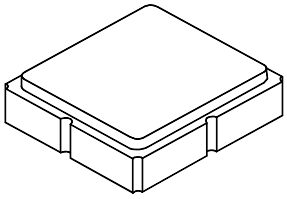


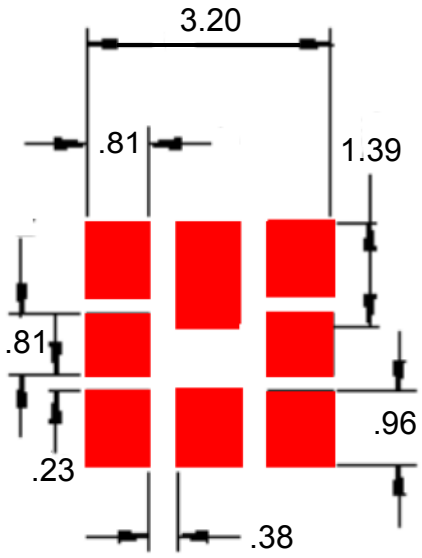
S21 Response: (Span 3 GHz)



SM3030-8 Case

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





Foot Print Dimensions

Case Dimensions

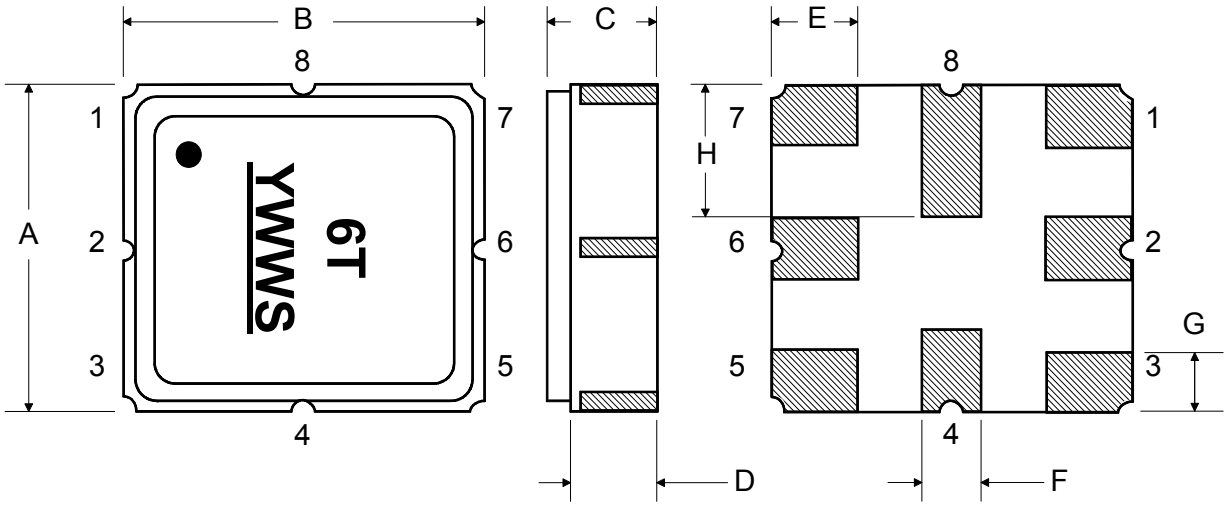
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	0.99	1.00	1.01	0.038	0.039	0.040
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052

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

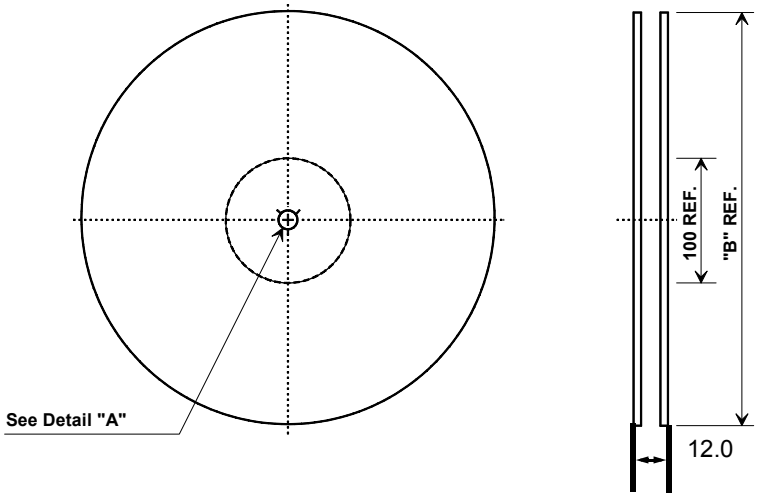
TOP VIEW

BOTTOM VIEW

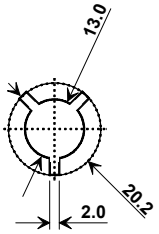


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

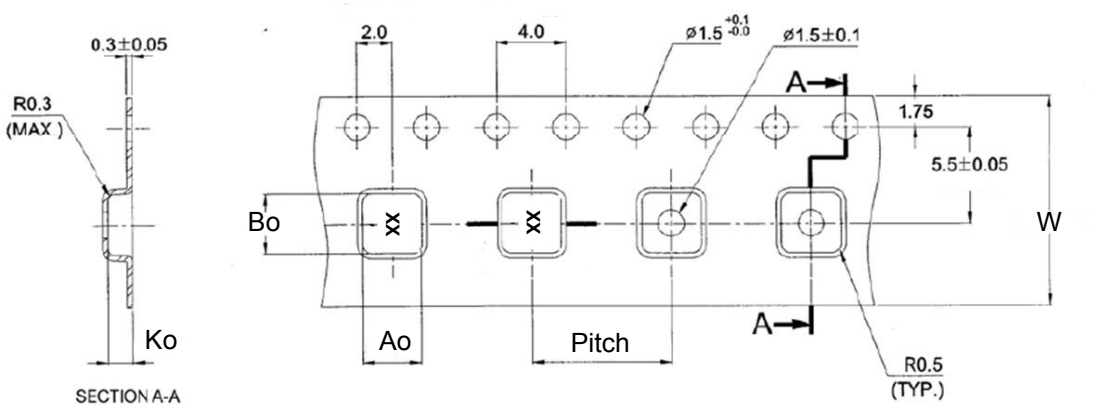


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	3.35, ±0.1 mm
Bo	3.35, ±0.1 mm
Ko	1.4, ±0.1mm
Pitch	8.0 mm
W	12.0, ±0.3 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.