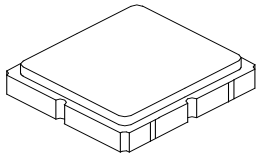
RFMi
A BRAND OF AKOUSTIS

Preliminary

RoHS compliant

SF2379E

742 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
Maximum DC Voltage Between any 2 Terminals	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		742		MHz
Minimum Insertion Attenuation (470 to 600 MHz)	α min		4	5	dB
Maximum Insertion Attenuation	α max				dB
47 to 68 MHz			0.5	1.0	
174 to 230 MHz			0.5	1.0	
470 to 600 MHz			4.0	5.0	
600 to 660 MHz			7.0	9.0	
Attenuation	dB				dB
694 to 790 MHz		15	18		
1210 to 1610 MHz		5	8		
1610 to 1990 MHz		3	5		

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

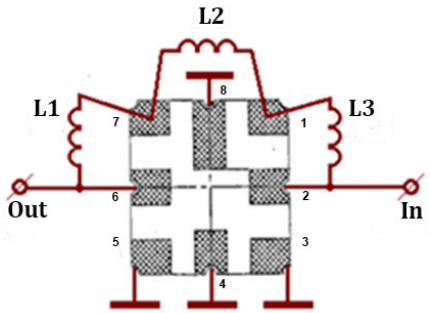
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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.

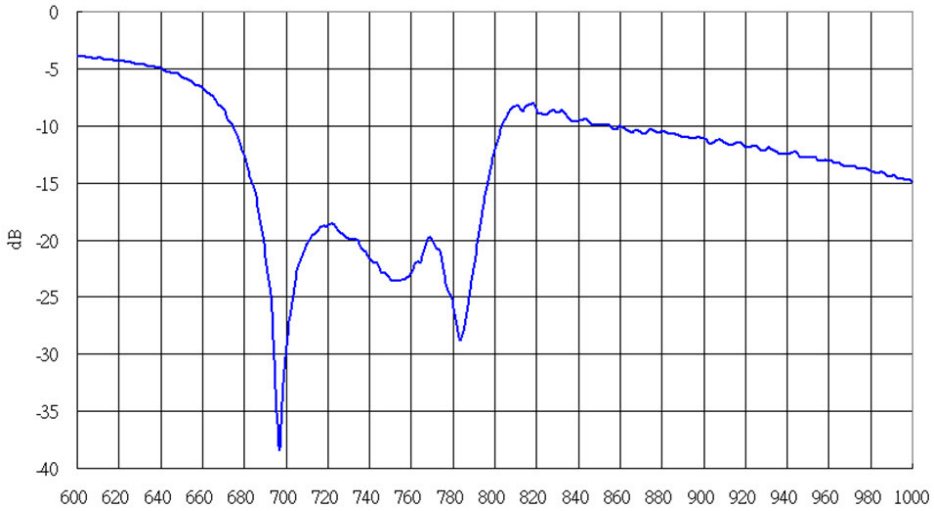
Electrical Connections

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

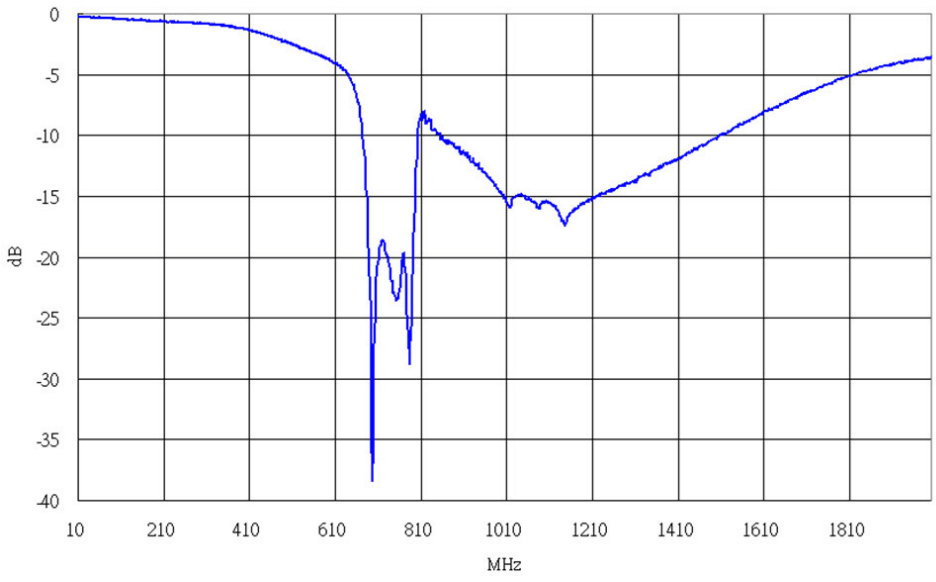


Frequency Characteristics

S21 Response: (Span 400 MHz)

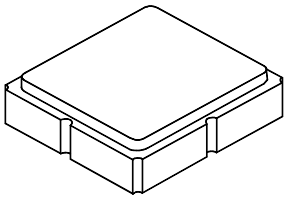


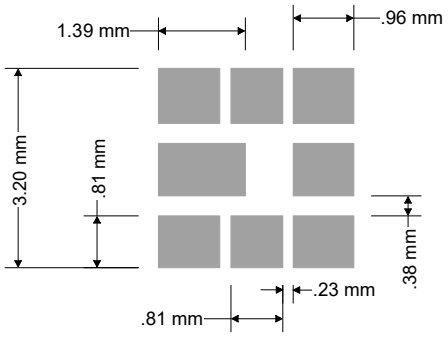
S21 Response: (Span 2 GHz)



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	-	3.0	-	-	0.118	-
B	-	3.0	-		0.118	-
C	0.99	1.00	1.10	0.038	0.039	0.043
D	-	0.75	-	-	0.029	-
E	-	0.60	-	-	0.024	-
F	-	0.60	-	-	0.024	-
G	-	1.20	-	-	0.047	-

Electrical Conections

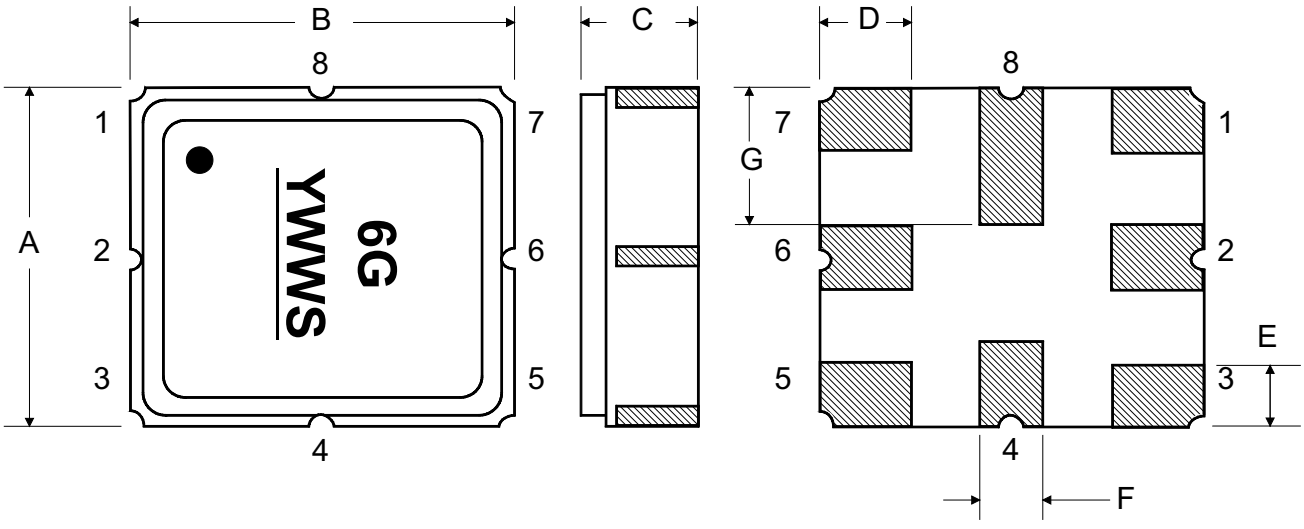
	Connection	Terminals
	Input	2
	Output	6
	Matching Port	1, 7
	Ground	All Others
Dot Indicates Pin 1		

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

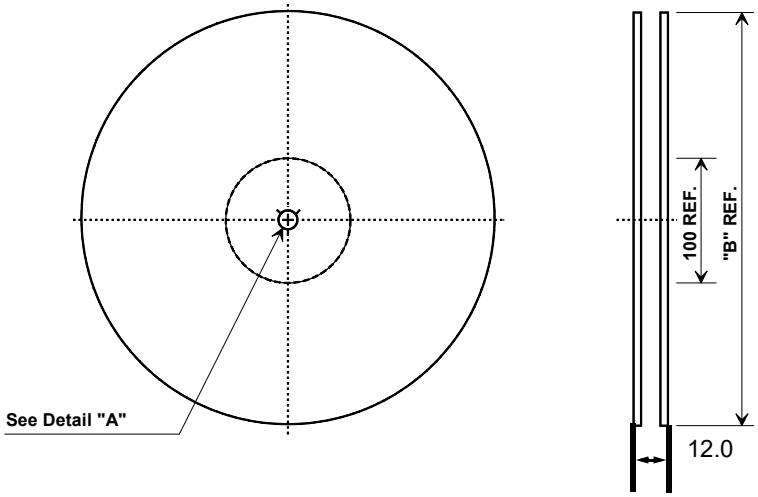
TOP VIEW

BOTTOM VIEW

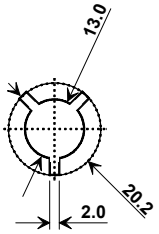


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

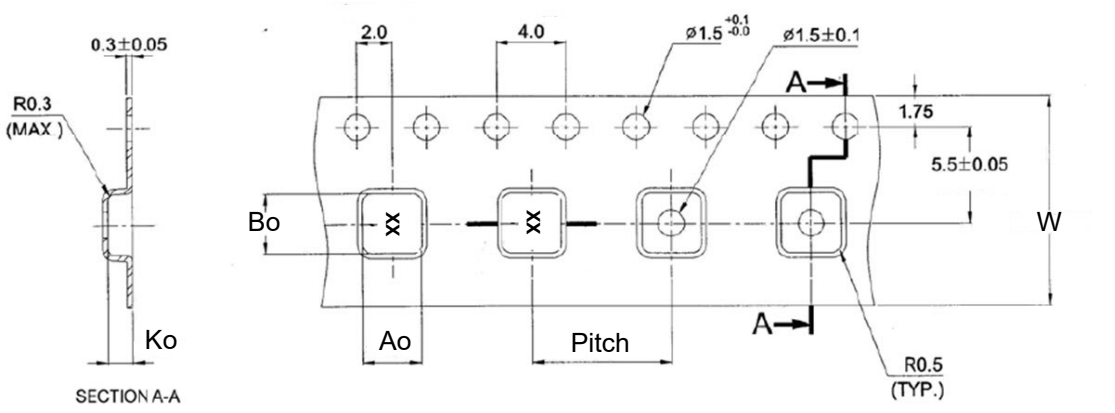


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	3.3, ±0.1 mm
Bo	3.3, ±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.