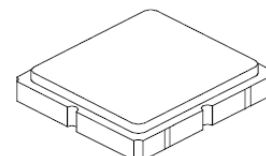


- **Designed for Front-end GPS Applications**
- **Low Insertion Loss**
- **3.0 x 3.0 x 1.3 mm Surface-mount Case**
- **No Matching Circuit Required**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level:1**
- **AEC-Q200 Qualified**

SF2428E

**1234.5 MHz
SAW Filter**



SM3030-6

Maximum Ratings at +25 °C Unless Stated Otherwise

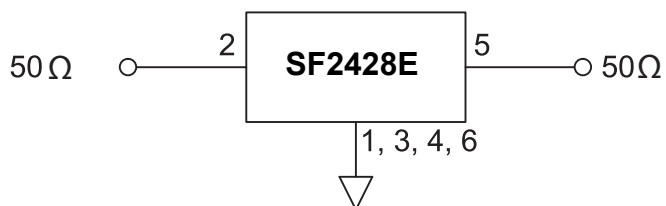
Rating	Value	Units
Maximum Input Power Level	+10	dBm
DC Voltage	3	Volts
Operating Temperature Range	-40 to +105	°C
Storage Temperature Range	-40 to +125	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	Fc			1234.5		MHz
Maximum Insertion Loss (1215 to 1254 MHz)	IL			2.8	4.0	dB
Amplitude Ripple (1215 to 1254 MHz)				0.7	2.0	
Group Delay Ripple				16	50	ns
Attenuation Referenced to 0 dB:						dB
10 to 1170 MHz			40	57		
1170 to 1185 MHz			30	53		
1300 to 1340 MHz			30	42		
1340 to 2000 MHz			40	52		
Temperature Coefficient of Frequency				-36		ppm/°C
Lid Symbolization (Y=year, WW=week, S=shift), dot = Pin 1 Indicator			8M, YWWS			

Electrical Connections

Pin #	Description	Pin #	Description
1	Ground	4	Ground
2	Input	5	Output
3	Ground	6	Ground

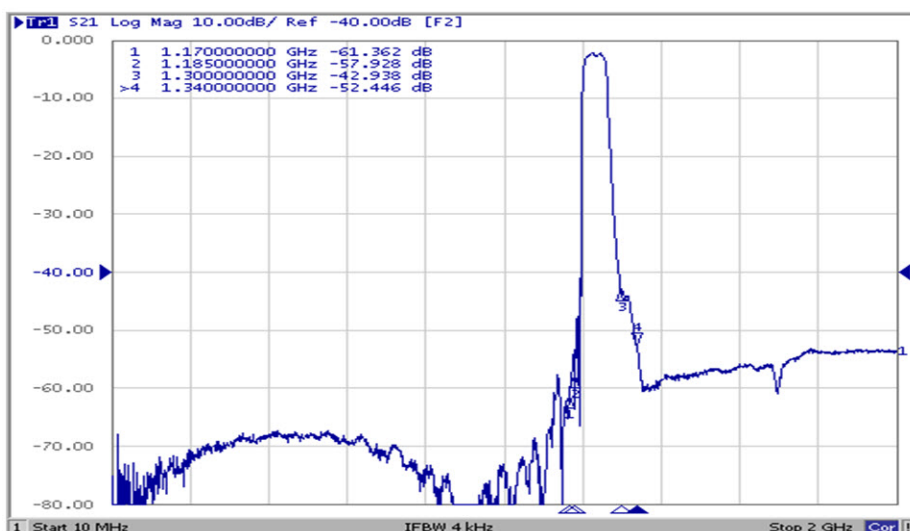
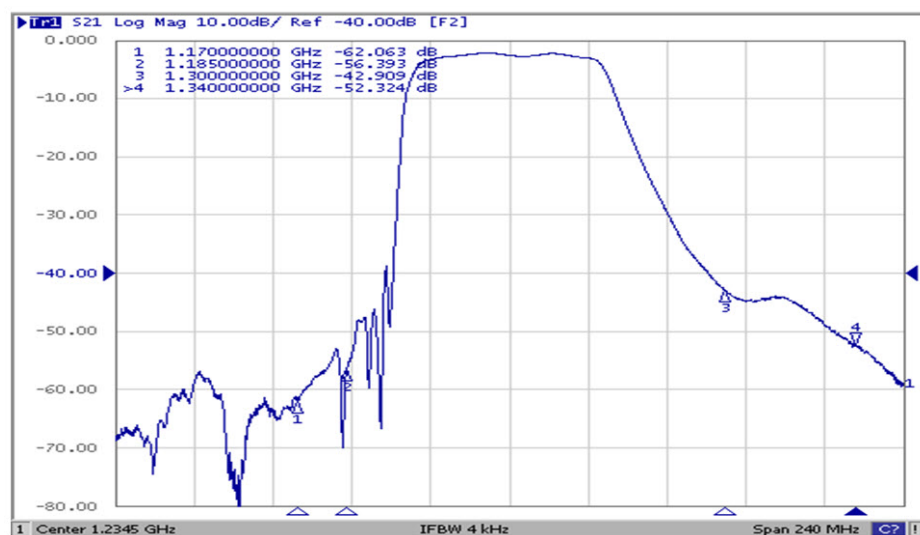
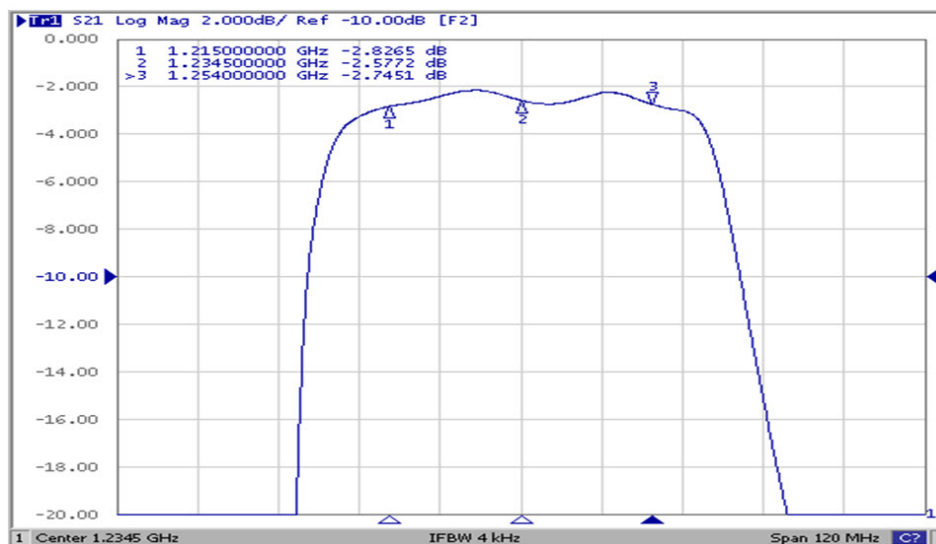


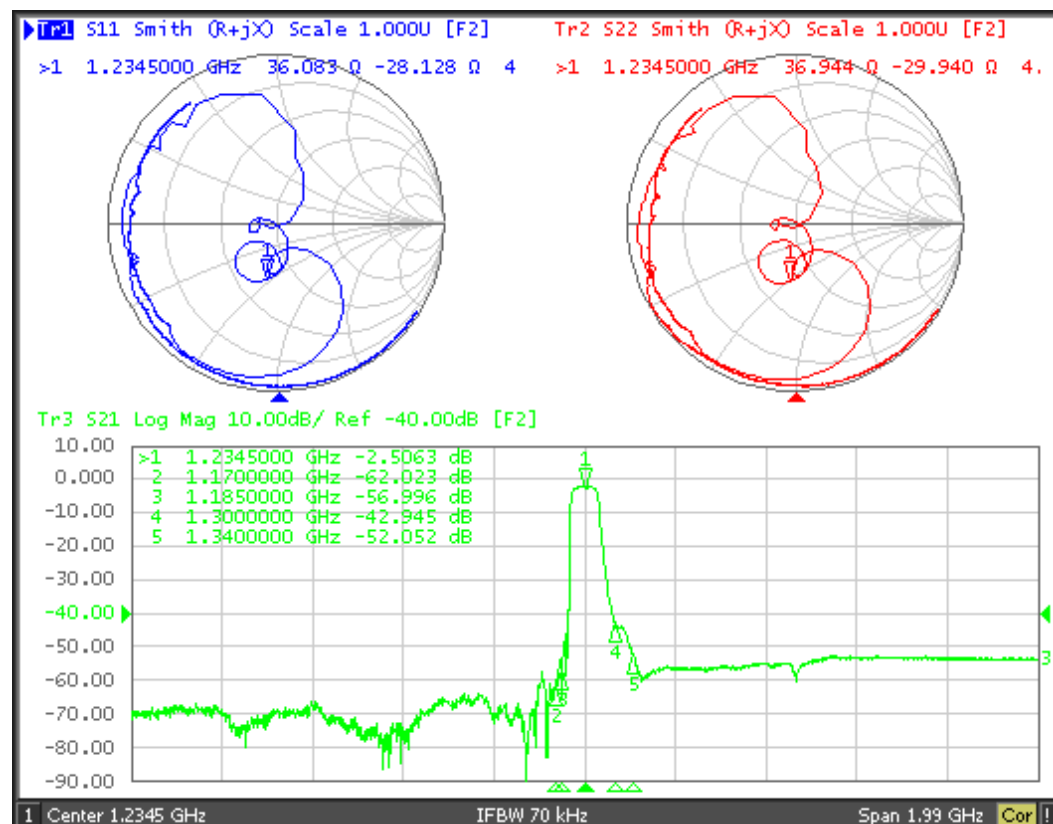
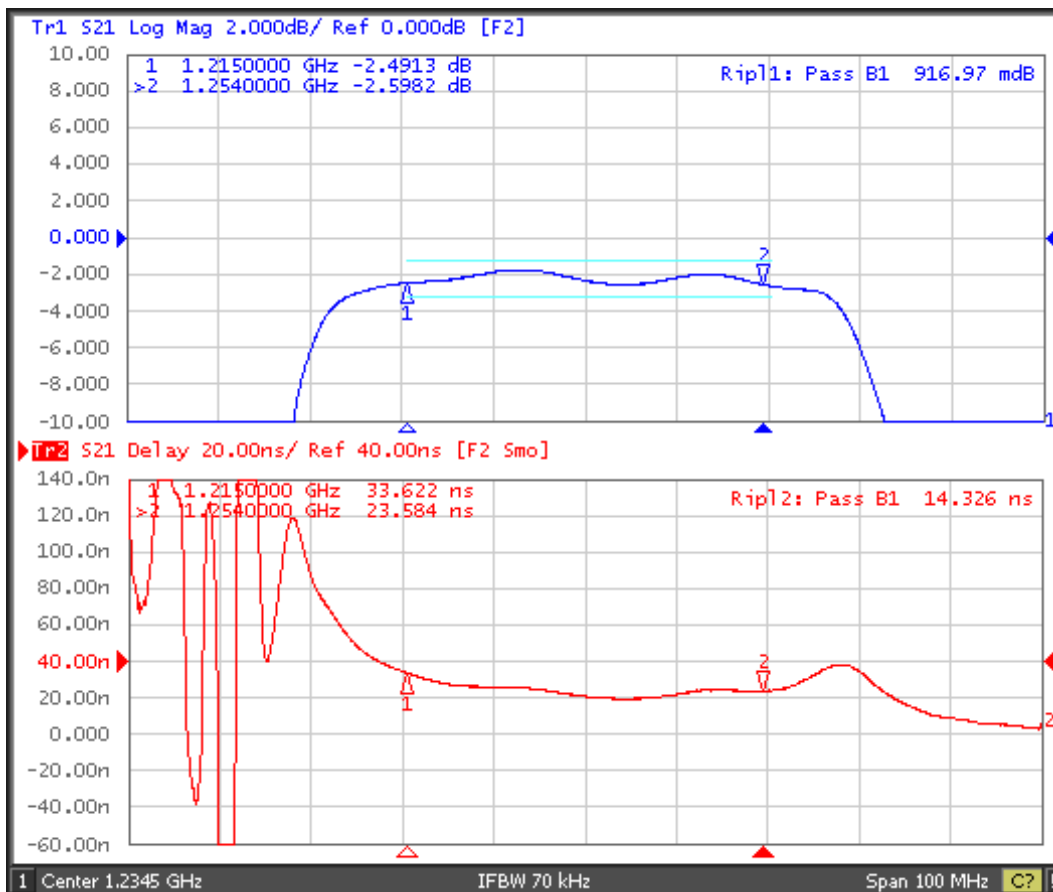
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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

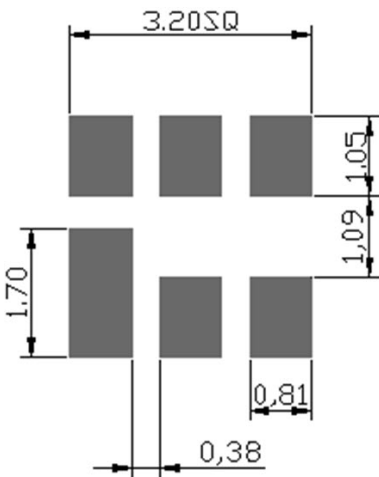
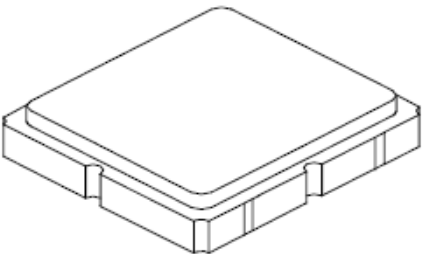




SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint



Foot Print Dimensions in Millimeters

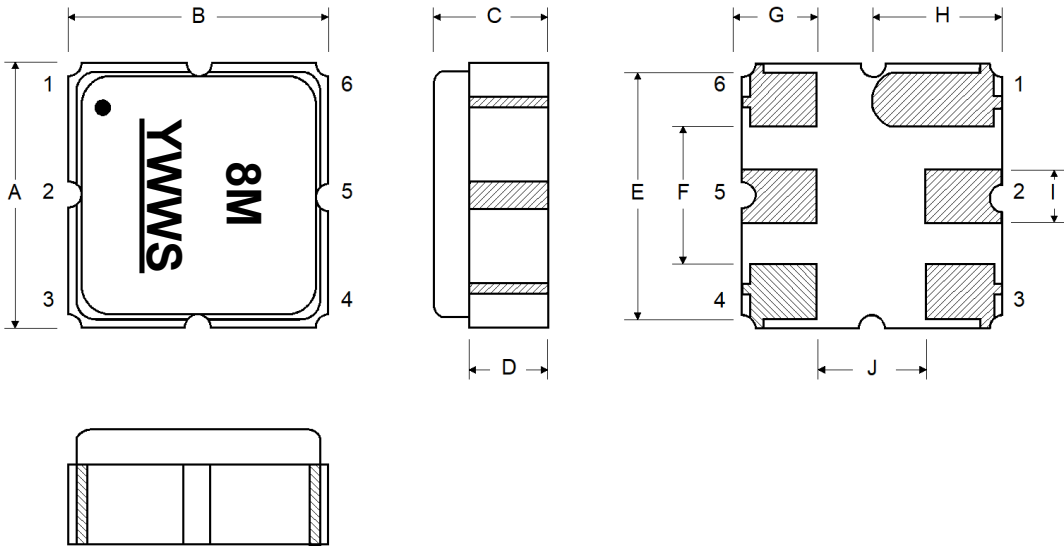
Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	3.0	-	-	0.118	-
B	-	3.0	-	-	0.118	-
C	-	-	1.4	-	-	0.055
D	-	0.9	-	-	0.035	-
E	-	2.80	-	-	0.110	-
F	-	1.6	-	-	0.063	-
G	-	0.85	-	-	0.033	-
H	-	1.5	-	-	0.059	-
I	-	0.6	-	-	0.024	-
J	-	1.3	-	-	0.051	-

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		

Case Materials	
Solder Pad Plating	0.3 to 1.0 μ m Gold over 1.27 to 8.89 μ m Nickel
Lid Plating	2.0 to 3.0 μ m Nickel
Body	Al ₂ O ₃ Ceramic

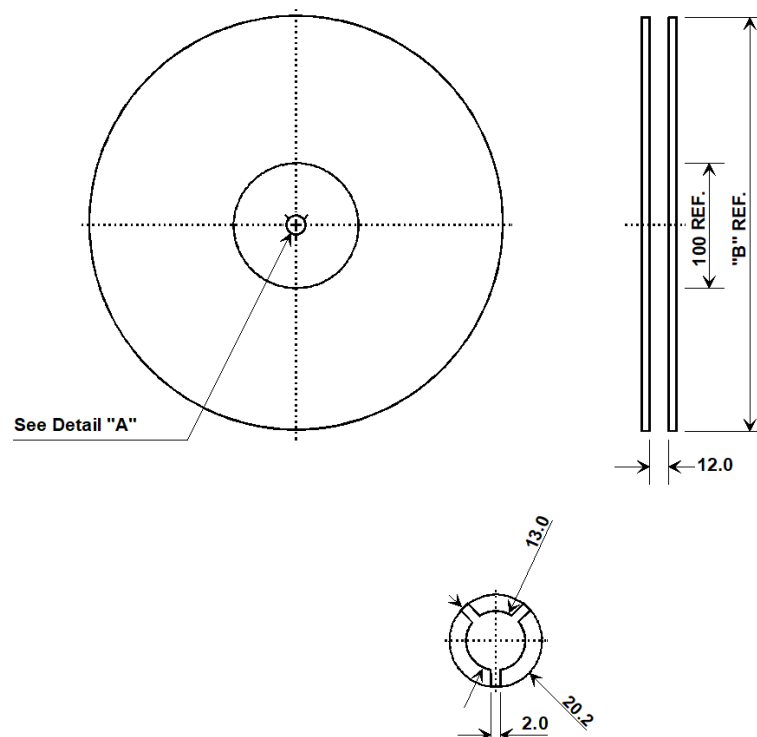
TOP VIEW

BOTTOM VIEW



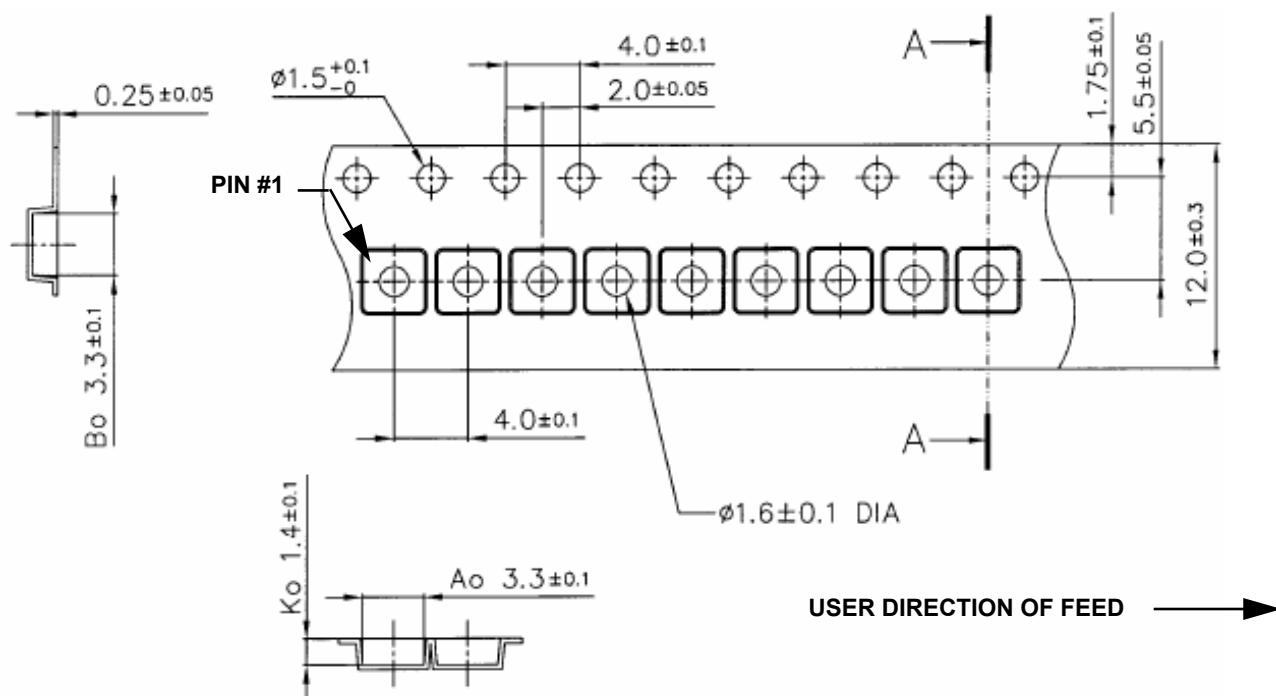
Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481



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

COMPONENT ORIENTATION



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.

