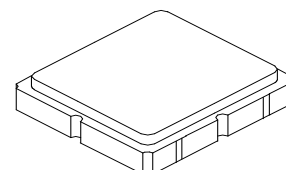


- **Designed for Front-end GPS Applications**
- **Low Insertion Loss**
- **3.0 x 3.0 x 1.3 mm Surface-mount Case**
- **No Matching Circuit Required**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Meets AEC-Q200 criteria**



SF2434E

**1223 MHz
SAW Filter**



SM3030-6

Maximum Ratings at +25 °C Unless Stated Otherwise

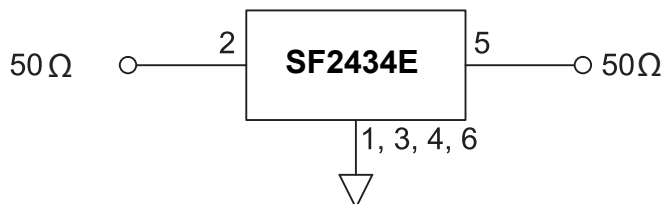
Rating	Value	Units
Maximum Input Power Level	+10	dBm
DC Voltage	3	Volts
Specification Temperature Range	-40 to +105	°C
Operable Temperature Range	-45 to +125	°C
Storage Temperature Range	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	Fc	1		1223		MHz
Maximum Insertion Loss (1196 to 1250 MHz)	IL			4.0	5.0	dB
Amplitude Ripple (1196 to 1250 MHz)				1.4	2.0	
Group Delay Ripple (1196 to 1250 MHz)				8	15	ns
(1226.577 to 1228.623 MHz)				1.0	5	
(1196.91 to 1217.37 MHz)				3.0	5	
(1242.426 to 1249.886 MHz)				2.0	5	
Attenuation Referenced to 0 dB:						dB
1051 - 1151 MHz			15	20		
1304 - 1354 MHz			15	28		
Temperature Coefficient of Frequency				-36		ppmk
Lid Symbolization (Y=year, WW=week, S=shift), dot = Pin 1 Indicator			8Q, YWWS			

Electrical Connections

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

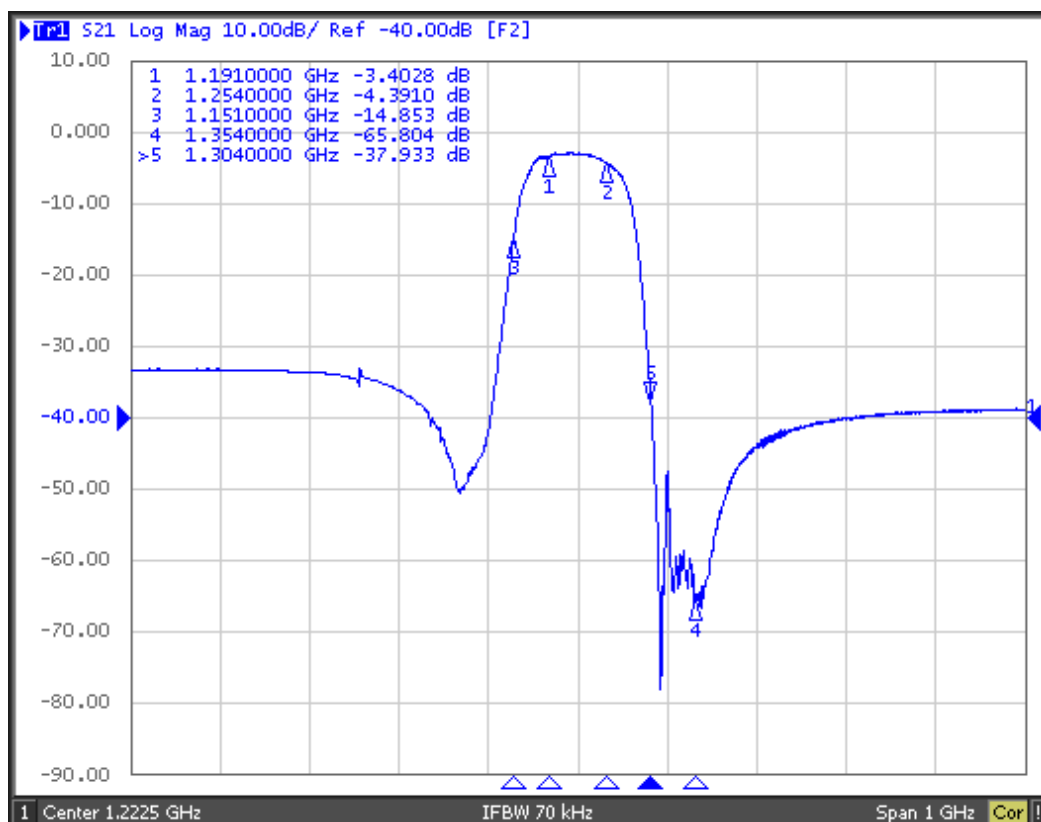
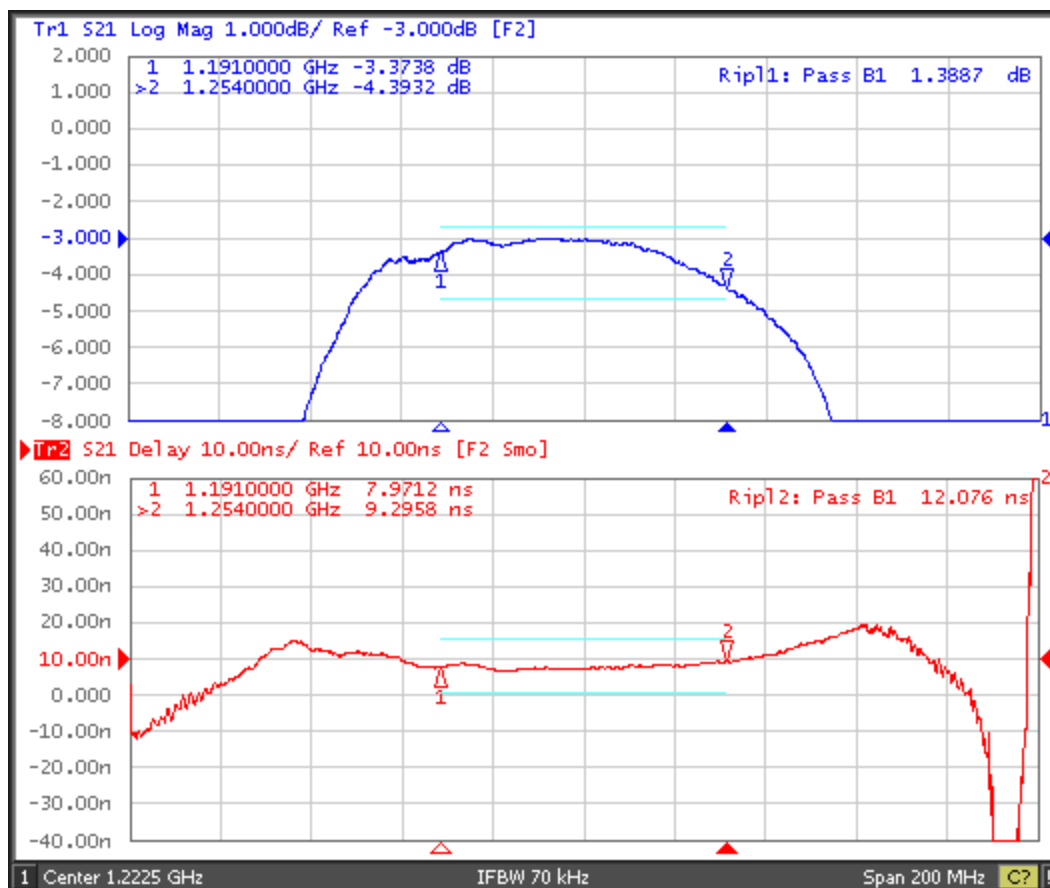


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board without impedance matching and measured with 50 Ω network analyzer.
2. The design, manufacturing process, and specifications of this filter are subject to change.
3. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
4. US and international patents may apply.
5. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
6. Tape and Reel Standard Per ANSI/EIA 481.

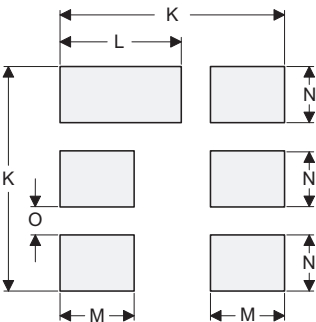
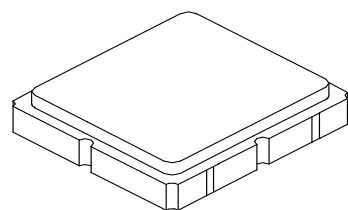
Frequency Characteristics



SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint



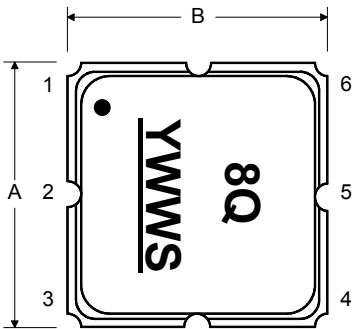
PCB Land Pattern
Top View

Case and PCB Footprint Dimensions

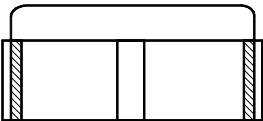
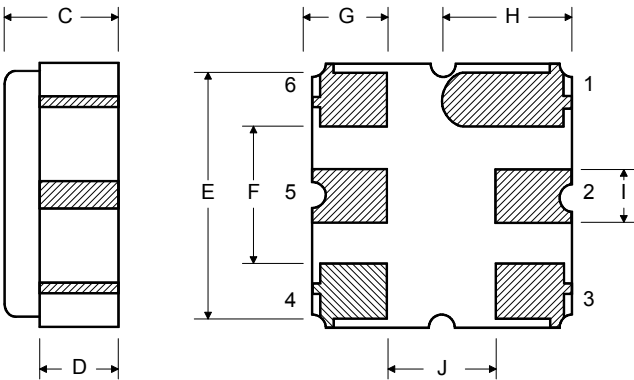
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.50	1.63	0.054	0.059	0.064
I	0.47	0.60	0.73	0.019	0.024	0.029
J	1.17	1.30	1.43	0.046	0.051	0.056
K		3.20			0.126	
L		1.70			0.067	
M		1.05			0.041	
N		0.81			0.032	
O		0.38			0.015	

Case 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 ₂ O ₃ Ceramic
Pb Free	

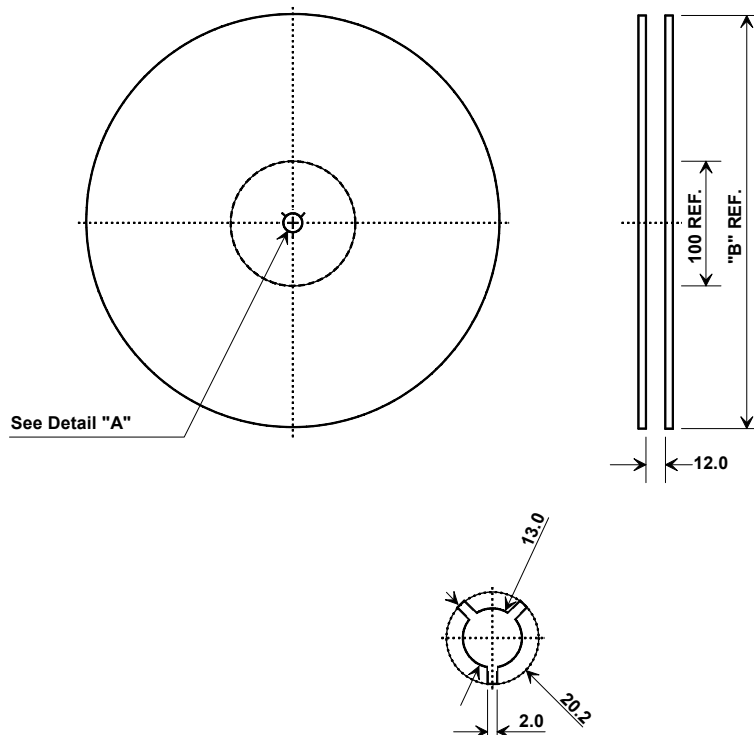
TOP VIEW



BOTTOM VIEW



Tape and Reel Specifications



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

COMPONENT ORIENTATION

