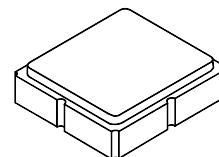


- Low Loss L-Band SAW Filter
- 200 ohm Balanced Input and Output Ports
- Complies with Directive 2002/95/EC (RoHS)



SF2017E

1220 MHz SAW Filter



SM3030-8

Maximum Rating

Rating	Value	Units
Input Power Level	0	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260 °C for 30 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			1220		MHz
Insertion Loss, 1216 to 1224 MHz	IL			3.4	5.3	dB
Amplitude Ripple, 1216 to 1224 MHz				0.6	1.8	dB _{p-p}
Attenuation, Referenced to 0 dB						dB
500 to 1129 MHz			50	57		
1129 to 1135 MHz			50	57		
1144 to 1152 MHz			46	57		
1132 MHz			50	57		
1148 MHz			48	57		
1176 MHz			50	56		
1184 MHz			46	55		
1290 to 2000 MHz			50	55		
Group Delay Ripple, 1216 to 1224 MHz				12		ns _{p-p}
Balanced Source Impedance				200		ohms
Balanced Load Impedance				200		ohms

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	898, YWWS					
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel				
	Reel Size 13 Inch	3000 Pieces/Reel				

	Connection	Terminals
Port 1	Balanced Input	1,2
Port 2	Balanced Output	5,6
	Ground	All Others

Dot Indicates Pin 1

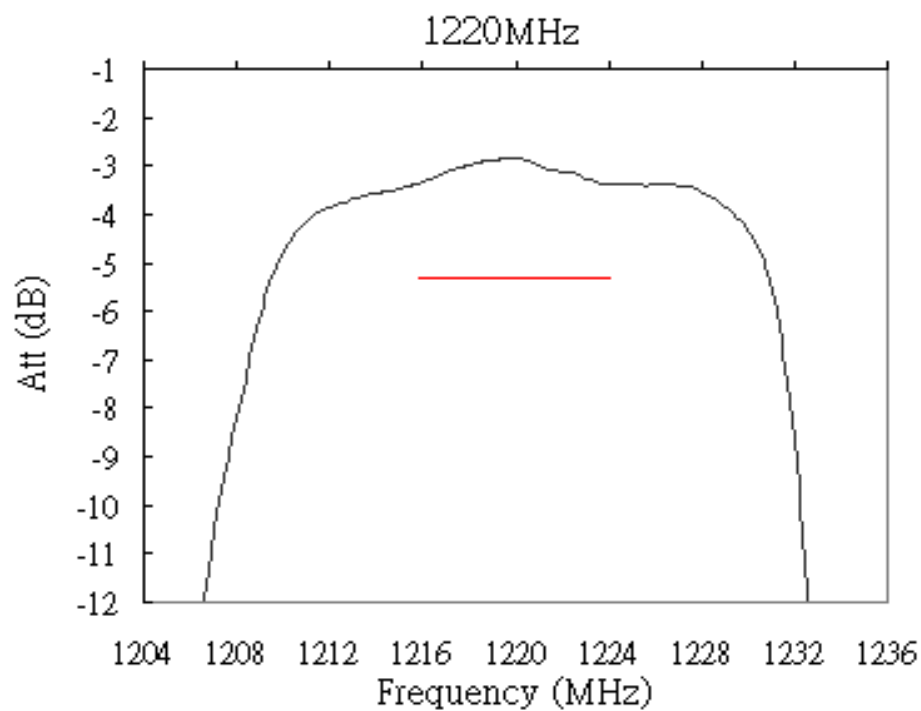
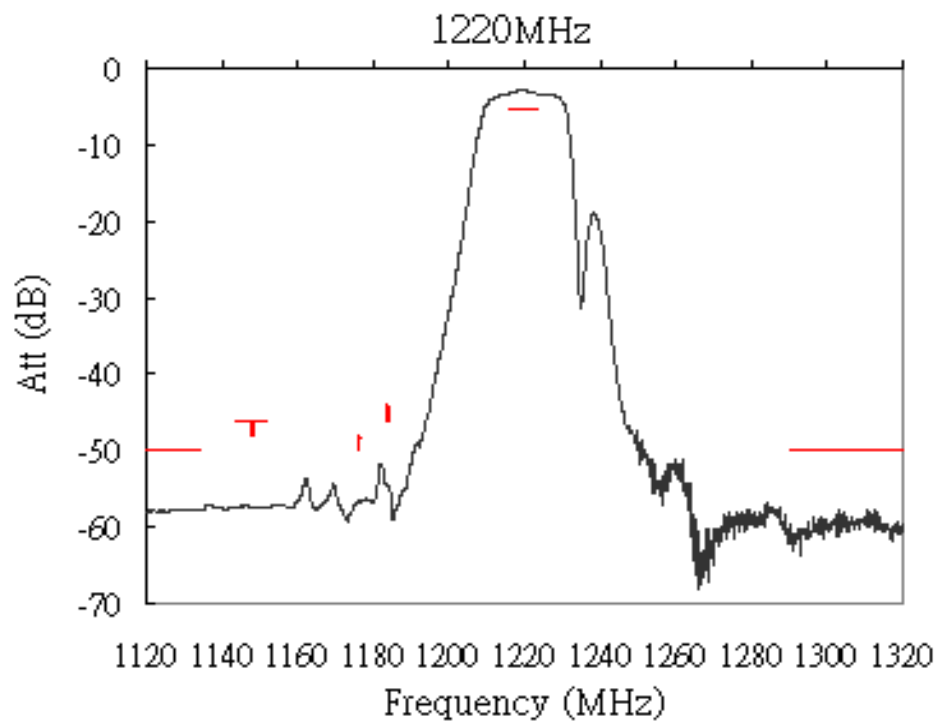


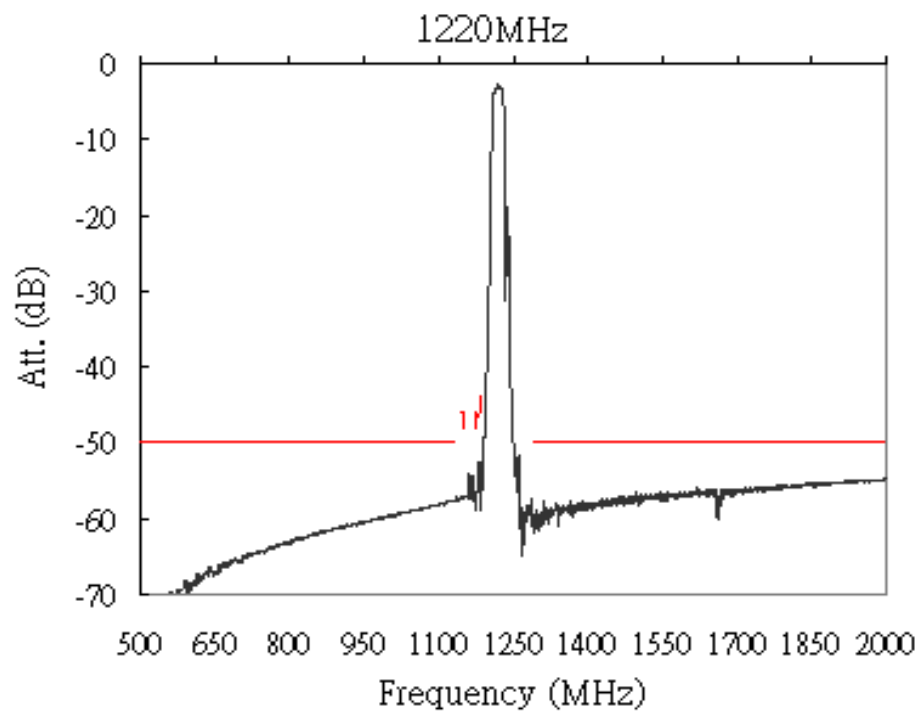
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

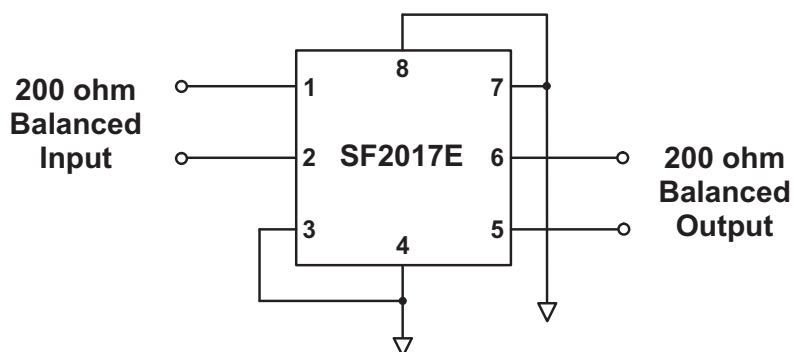
Frequency Response Plots



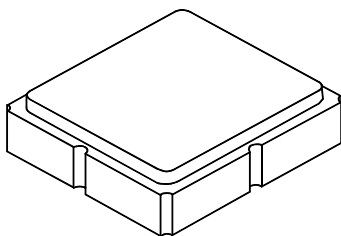


Matching Network Topology

SF2017E Test Circuit

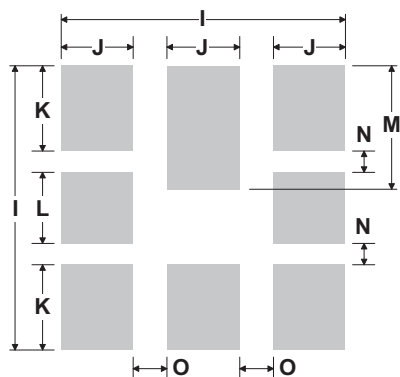


8-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



Case and PCB Footprint Dimensions

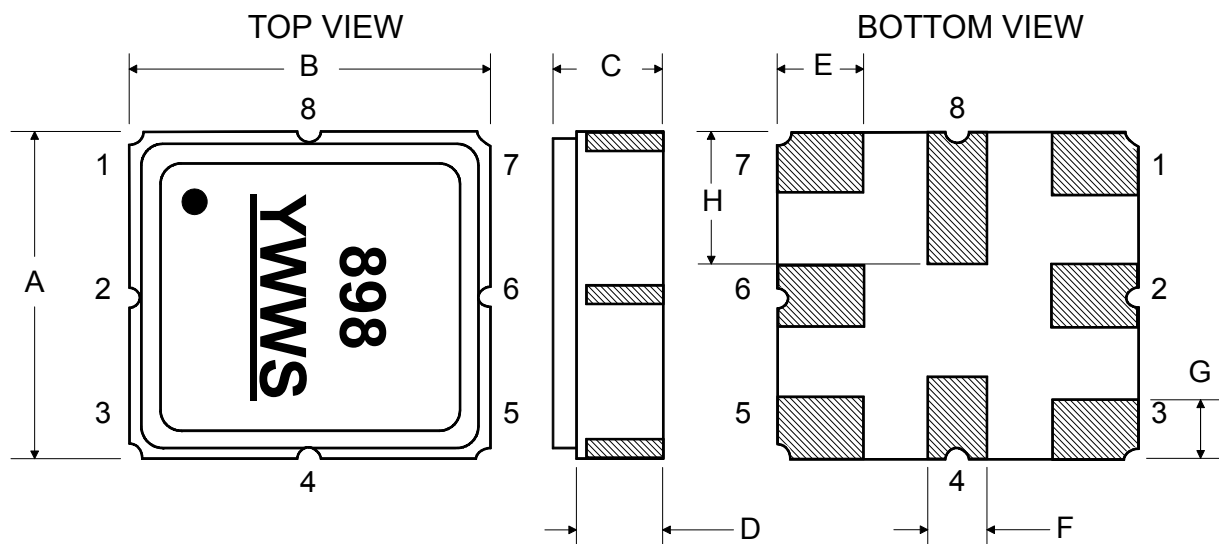
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	1.14	1.27	1.40	0.045	0.050	0.055
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052
I		3.19			0.126	
J		0.81			0.032	
K		0.96			0.038	
L		0.81			0.032	
M		1.39			0.055	
N		0.23			0.009	
O		0.38			0.015	



PCB Footprint Top View

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
Pb Free	



Technical drawing of a circular component, likely a flange or end plate, showing three views: a top view, a side view, and a detail view.

Top View: A large circle with a smaller concentric circle in the center. A crosshair (dashed lines) is centered on the circles. A leader line points from the text "See Detail 'A'" to the center of the inner circle.

Side View: Two vertical rectangles representing the component's profile. The total width is dimensioned as 12.0. The height is dimensioned as 100 REF. and "B" REF. (Reference dimension).

Detail View (Detail A): A cross-sectional view of the central hole. It shows a circular hole with a diameter of 13.0. The hole is surrounded by a flange with a thickness of 2.0. The distance from the center of the hole to the outer edge of the flange is dimensioned as 20.2.

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

Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.4 mm
Pitch	8.0 mm
W	12.0 mm

