

- SAW Filter for Smart Meters
- 5.0 x 5.0 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS)

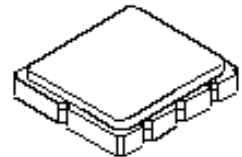


Absolute Maximum Ratings

Rating	Value	Units
Operating Temperature Range	-20 to +70	°C
Terminating Impedance (Matching)	50	Ω
Input Power Level	10	dBm
DC Voltage	5	V
Storage Temperature	-40° to + 85°	C

SF2365C

**169.4375 MHz
SAW Filter**



SM5050-8

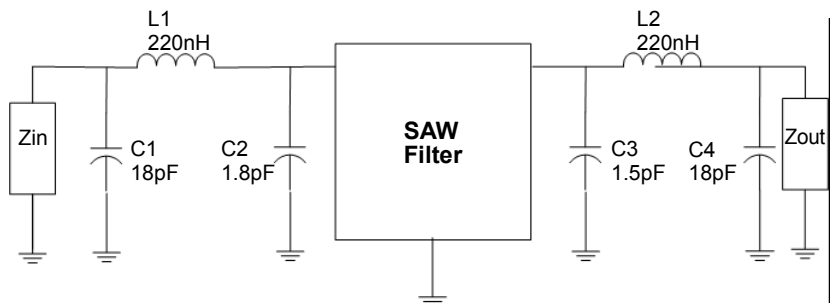
Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	Fc	1	169.4375			MHz
3 dB passband width			-37.5		+37.5	kHz
Insertion Loss at Center Frequency	ILc			4.7	6.0	dB
Ripple (169.4 to 169.475)					2.0	dB
Attenuation (from min loss in passband)						dB
165.4375 to 168.5175 MHz			40	55		
168.5175 to 169.1275 MHz			30	45		
169.7475 to 170.3575 MHz			30	60		
170.3575 to 173.4375 MHz			40	46		
Temperature Coefficient of Frequency	TCf		-0.033			ppm/C ^Δ

Case Style	SM5050-8 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift)	B-28, YWWS

Electrical Connections

Connection	Terminals
Input	1
Output	5
Ground	3, 4, 7, 8
Input Ground	2
Output Ground	6

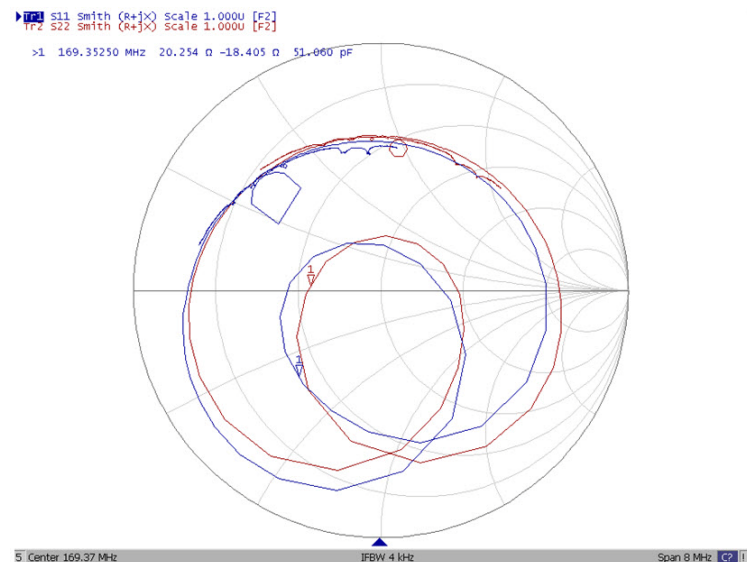
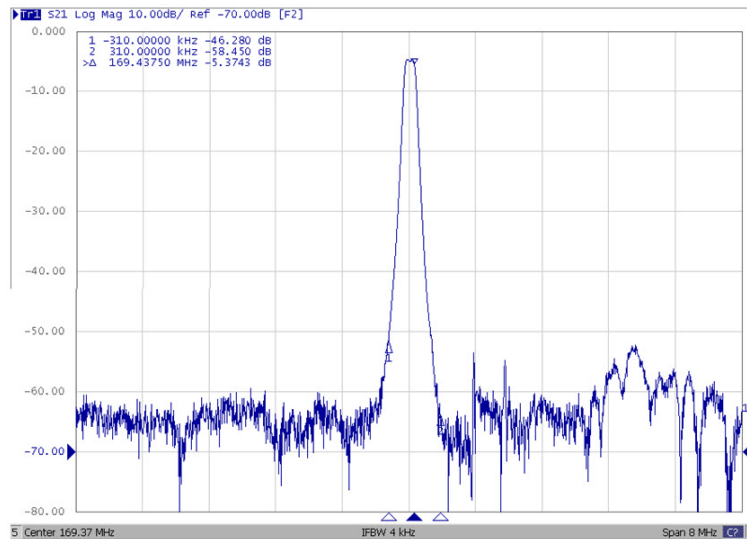
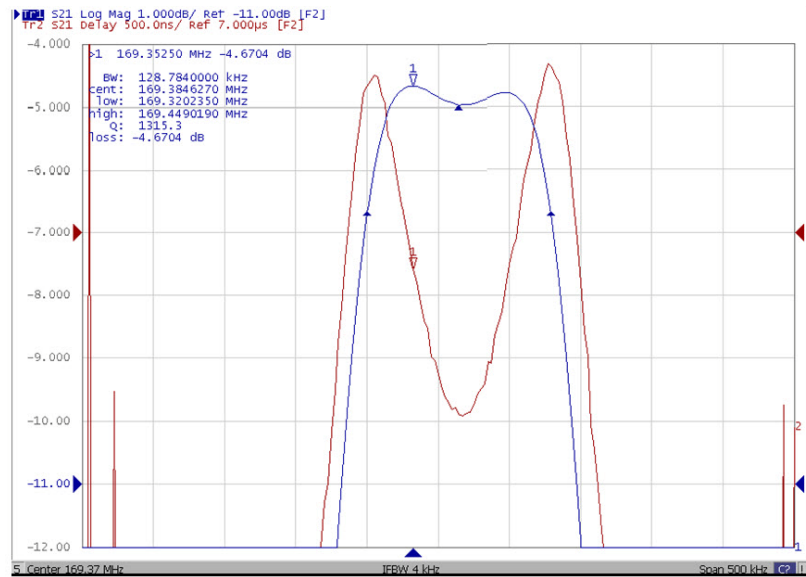


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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 Characteristics

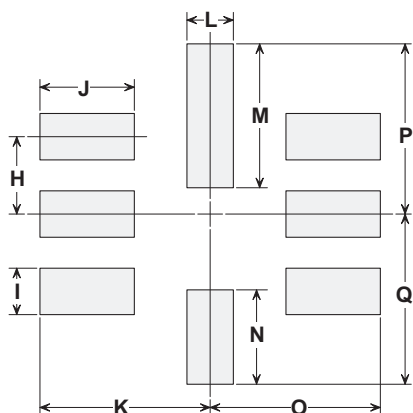


SM5050-8 Case

8-Terminal Ceramic Surface-Mount Case

5.0 X 5.0 mm Nominal Footprint

PCB Footprint



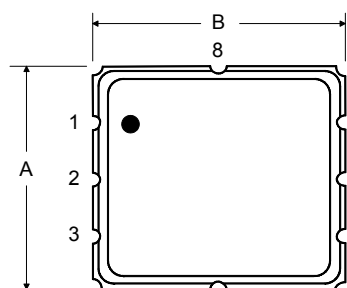
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.80	5.00	5.20	0.189	0.197	0.205
B	4.80	5.00	5.20	0.189	0.197	0.205
C	1.03	1.15	1.27	0.040	0.043	0.050
D	1.93	2.08	2.23	0.078	0.082	0.086
E	1.05	1.20	1.35	0.041	0.047	0.053
F	0.50	0.40	0.70	0.019	0.001	0.027
G	2.39	2.54	2.69	0.094	0.100	0.106
H		1.27			0.050	
I	0.55	0.60	0.65	0.021	0.023	0.025
J		1.55			0.061	
K		2.79			0.110	
L		0.76			0.030	
M		2.36			0.093	
N		1.55			0.061	
O		2.79			0.110	
P		2.79			0.110	
Q		2.79			0.110	

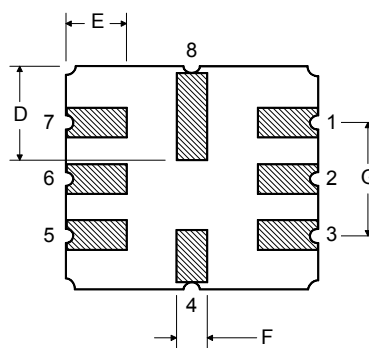
Materials

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
Pb Free	

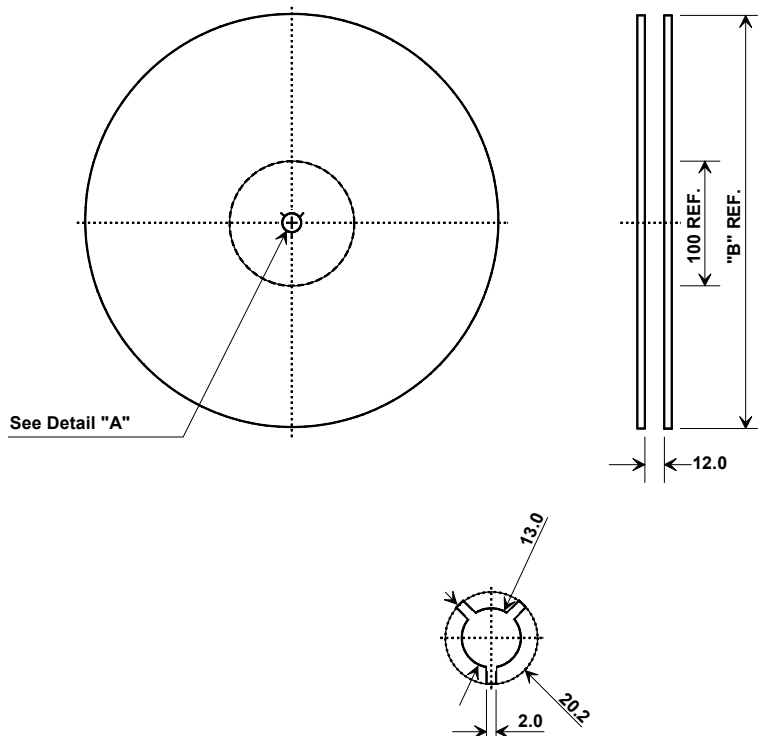
TOP VIEW



BOTTOM VIEW



Tape and Reel Specifications



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

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.3 mm
Bo	5.3 mm
Ko	2.0 mm
Pitch	8.0 mm
W	12.0 mm

COVER TAPE SIZE

