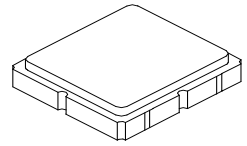
PRELIMINARY

muRata
INNOVATOR IN ELECTRONICS

SF2424D

505 MHz SAW Filter

- ***Hermetically sealed Surface Mount package***
- ***Complies with Directive 2002/95/EC (RoHS)***



SM3838-8 Case

Absolute Maximum Ratings

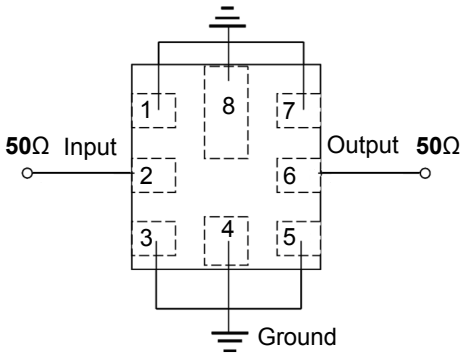
Rating	Value	Units
Maximum Input Power	10	dBm
DC Voltage	10	VDC
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +85	°C

Electrical Characteristics

Characteristic		Sym	Notes	Minimum	Typical	Maximum	Units
Center Frequency		f_C			505		MHz
Insertion Loss	500 - 508 MHz	IL			2.6	4.1	dB
	500 - 510 MHz				2.8	4.1	
Amplitude Ripple	500 - 508 MHz				0.5	2.5	dB
	500 - 510 MHz				0.6	2.5	
Attenuation (Reference level from 0dB)							dB
404 to 463.2 MHz				42	50		
544 to 604 MHz				42	48		
Temperature Coefficient of Frequency					-36		ppm/k
Terminating Source Impedance (single) Z_S Terminating Load Impedance (single) Z_L				50			Ω
Footprint Size: 3.8 X 3.8				SM3838-8			
Lid Symbolization (Y=Year, WW=week, S=shift)		B38//YWWS					

Electrical Connections

Connection	Terminals
Input	2
Output	6
Ground	All Others



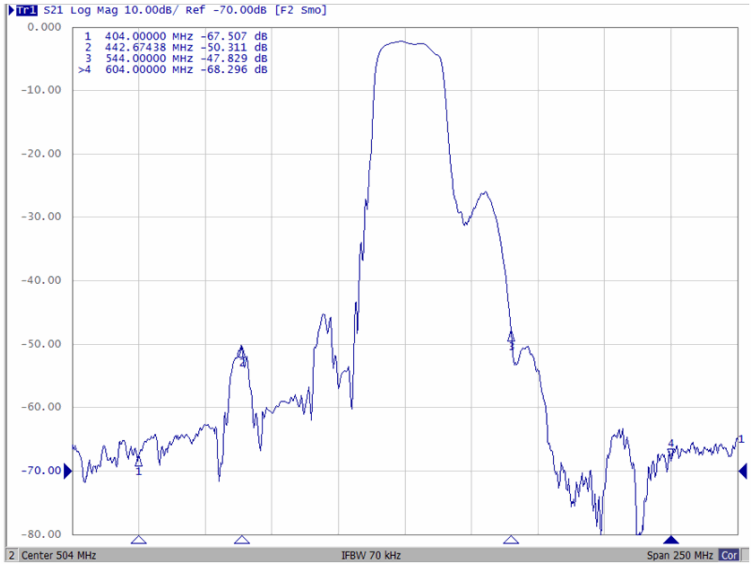
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

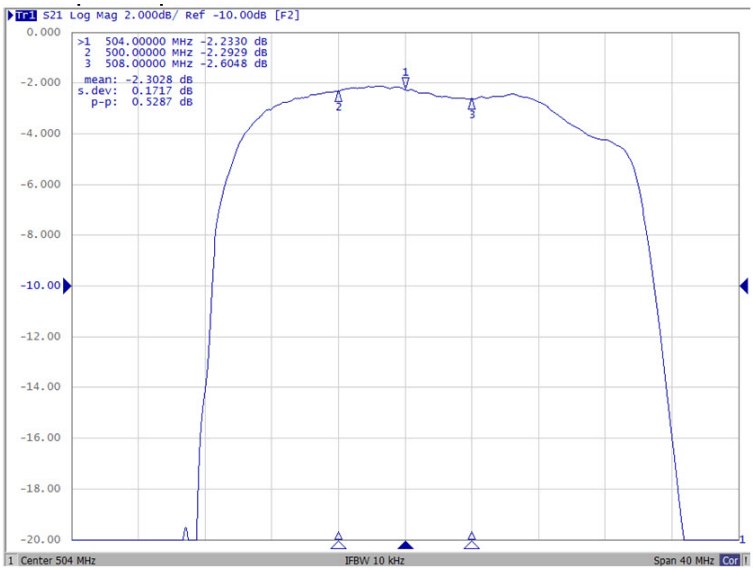
1. All specifications apply over the operating temperature range with filter soldered to the specified demonstration board unless noted otherwise.
2. Ultimate rejection is dependent on PCB layout.
3. Specifications subject to change without notice.
4. Electrostatic Sensitive Device. Observe precautions for handling.
5. US and international patents may apply.
6. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Frequency Characteristics

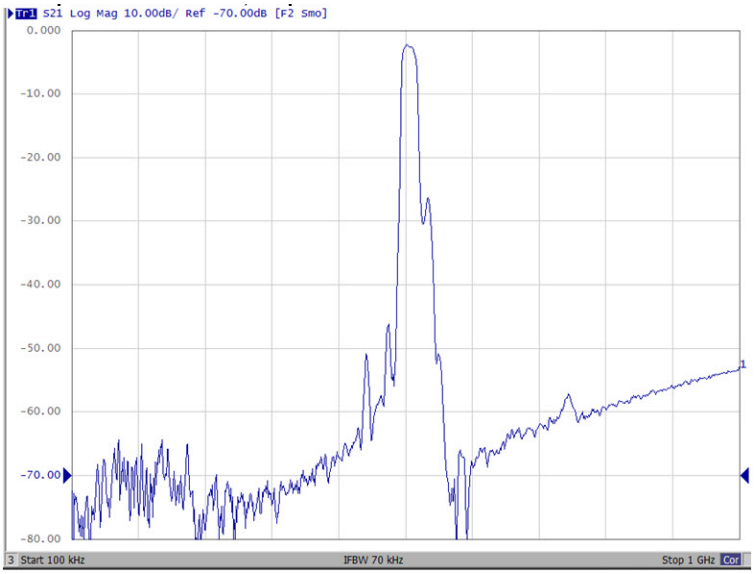
S21 Response: Center 504 MHz, Span 250 MHz



S21 Response: Span 40 MHz



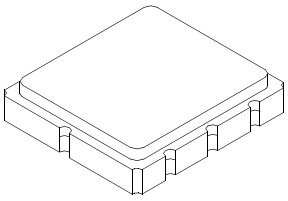
S21 Response: 0 - 1000 MHz

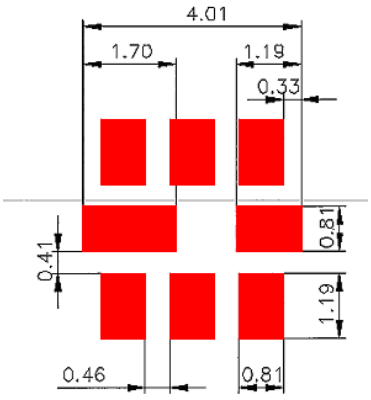


SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint





PCB Footprint

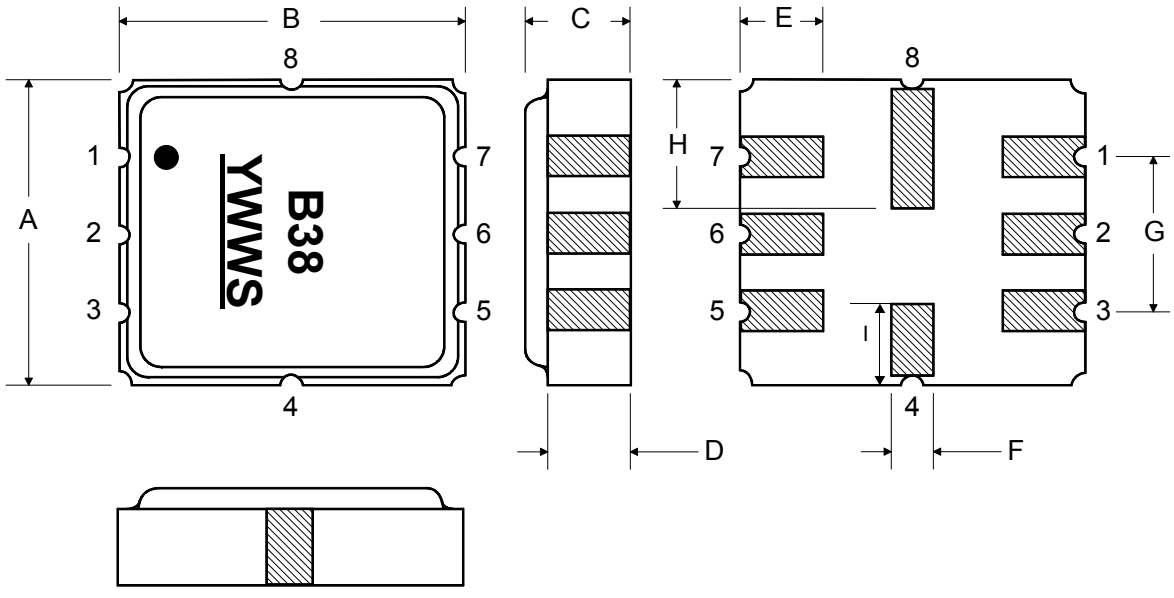
Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.65	3.80	3.95	0.143	0.149	0.155
B	3.65	3.80	3.95	0.143	0.149	0.155
C	-	-	1.40	-	-	0.055
D	0.95	1.10	1.25	0.037	0.043	0.049
E	0.90	1.00	1.10	0.035	0.040	0.043
F	0.50	0.60	0.70	0.020	0.024	0.028
G	2.39	2.54	2.69	0.090	0.100	0.110
H	1.40	1.75	2.05	0.055	0.069	0.080
I	0.90	1.00	1.10	0.035	0.040	0.043

Electrical Connections		
	Connection	Terminals
Port 1	Input	2
Port 2	Output	6
	Ground	All Others
Dot Indicates Pin 1		

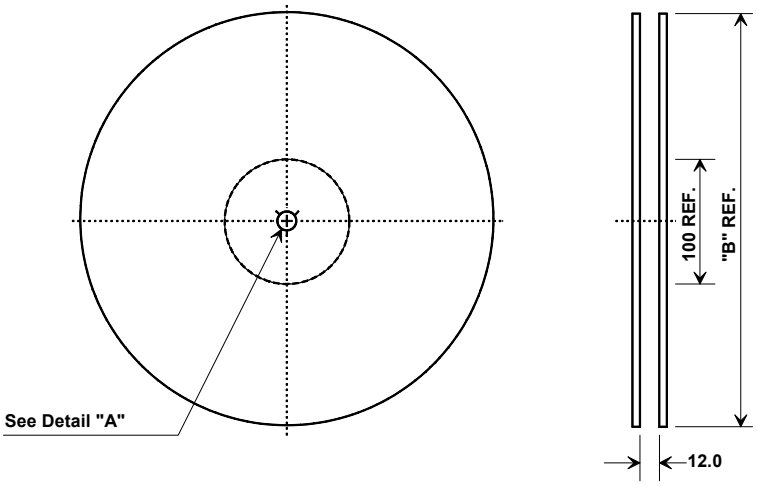
Materials	
Solder Pad Termination	Au plating 30 - 60 µInches (76.2-152 µM) over 80-200 µInches (203-508 µM) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 µInches Thick
Body	Al_2O_3 Ceramic
Pb Free	

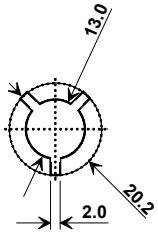
TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications

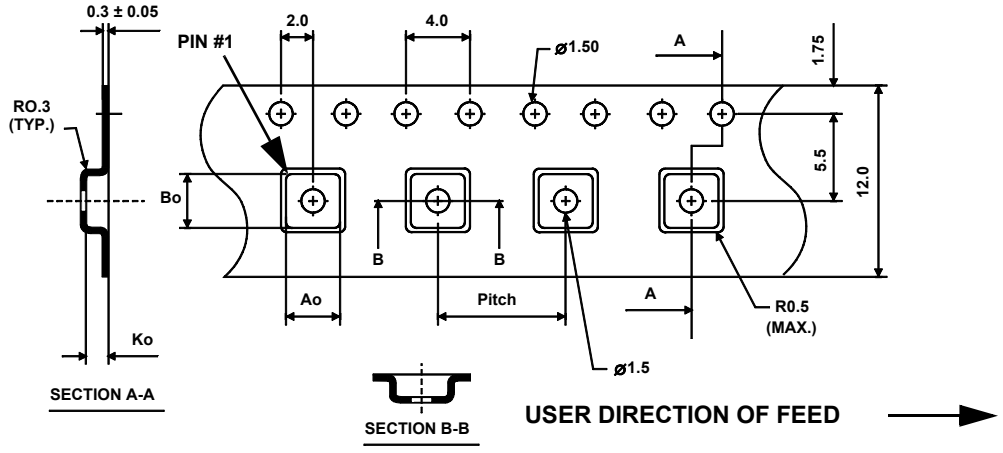




"B " Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm



Reflow Profile