

Discontinued

SF2431D

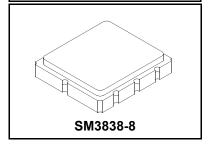
- High Performance SAW Filter
- 3.8 x 3.8 mm Surface-mount Package
- Complies with Directive 2002/95/EC (RoHS)



Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage Between any Two Active Terminals	3	VDC
Operable Temperature Range	-45 to +125	°C
Specification Temperature Range	-40 to +85	°C
Storage Temperature Range	-40 to +95	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260 °C for 10 sec	

505 MHz **SAW Filter**



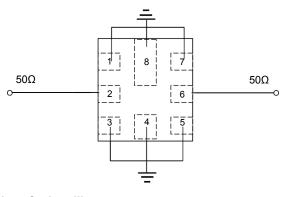
Electrical Characteristics

Characteristic	Sym	Notes	Min	Тур	Max	Units
Center Frequency	f _C			505		MHz
Insertion Loss (500 to 510 MHz)	ILmin			2.2	3.2	dB
Amplitude Ripple (500 to 510 MHz)				0.8	1.5	
Attenuation (Reference level from 0dB)						
0 to 485 MHz			40	50		dB
555 to 800 MHz			45	50		

Case Style	3.8 x 3.8 mm Nominal Footprint
Lid Symbolization, Y=year, WW=week, S=shift, Dot=pin 1 indicator	B41, <u>YWWS</u>

Electrical Connections

Connection	Terminals
Input	2
Output	6
Case Ground	All others



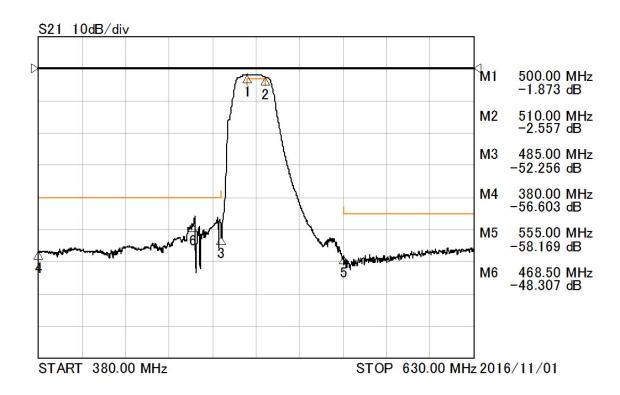
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES:

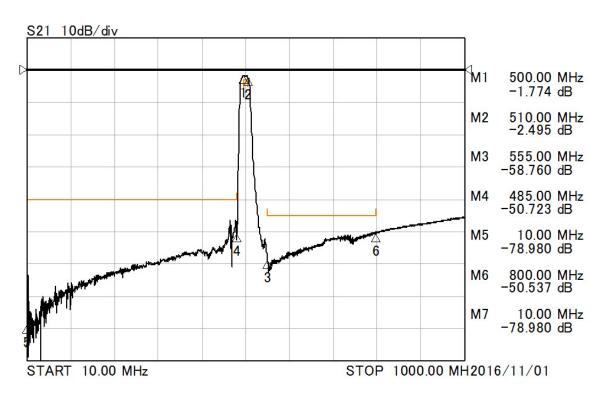
- Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network ana-
- Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
- Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
- "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
 The design, manufacturing process, and specifications of this filter are
- subject to change.

 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.
- WS and international patents may apply.

 Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

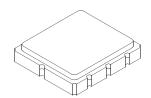
Frequency Characteristics

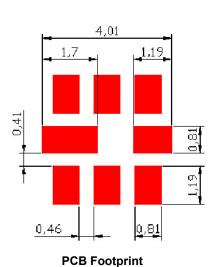




SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case 3.8 X 3.8mm Nominal Footprint



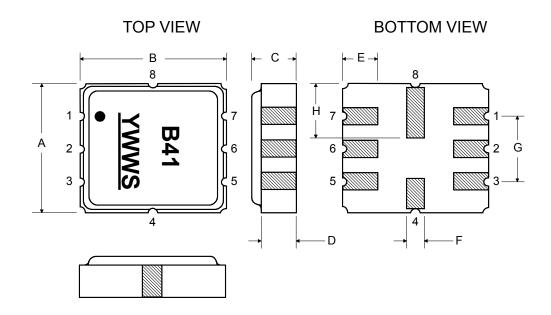


Case Dimensions

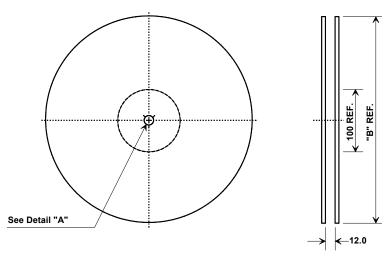
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
Α	3.65	3.8	3.95	0.14	0.15	0.155
В	3.65	3.8	3.95	0.14	0.15	0.155
С	-	-	1.40	-	-	0.055
D	-	1.10	-	-	0.043	-
E	-	1.0	-	-	0.04	-
F	-	0.6	-	-	0.024	-
G	-	2.54	-	-	0.100	-
Н	-	1.50	-	-	0.059	-

Case Materials

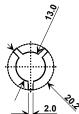
Materials				
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel			
Lid Plating	2.0 to 3.0 µm Nickel			
Body	Al ₂ O ₃ Ceramic			
Pb Free				



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
Во	4.25 mm
Ko	1.3 mm
Pitch	8.0 mm
W	12.0 mm

