

Discontinued

RFM products are now
Murata products.

- **RF Filter for Pager Applications**
- **High Rejection Out of Band**
- **Complies with Directive 2002/95/EC (RoHS)**

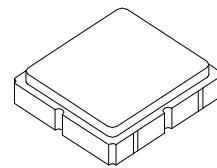


Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	0	dBm
Maximum DC Voltage Between Any Two Terminals	30	VDC
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260 °C for 30 s	

SF2008D

**930.5 MHz
SAW Filter**



SM3838-6

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			930.5		MHz
Passband Insertion Loss, 928.5 to 932.5 MHz	IL_{MAX}	1			4.5	dB
Passband Amplitude Ripple, 928.5 to 932.5 MHz		1, 2			2.0	dB_{P-P}
Rejection Referenced to IL_{MAX}						
400 to 880 MHz			35			
884.8 to 890.2 MHz			40			
906.8 to 911.2 MHz			30			
980 to 1300 MHz			35			
Operating Temperature Range	T_A	1	-20		+70	°C
Input Impedance at f_C				50 - j57 ohm		
Output Impedance at f_C				50 - j57 ohm		
Case Style				SM3838-6 3.8 x 3.8 mm Nominal Footprint		
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator				455, YWWS		
Standard Reel Quantity	Reel Size 7 Inch			1000 Pieces/Reel		
	Reel Size 13 Inch			3000 Pieces/Reel		

Electrical Connections

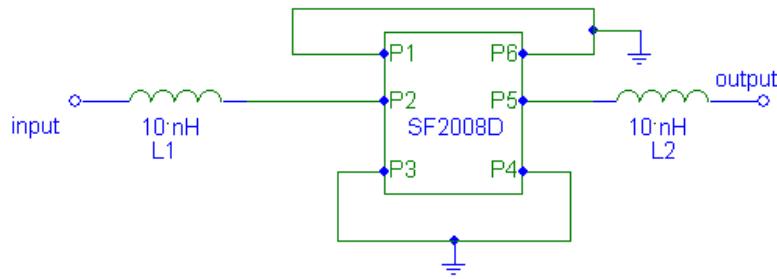
Connection	Terminals
Port 1	2
Port 2	5
Case Ground	All others

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

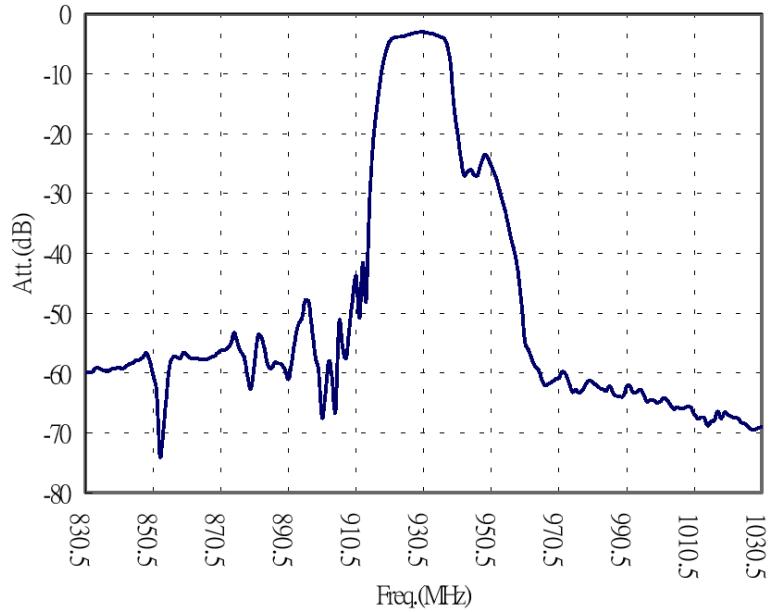
NOTES:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50Ω and measured with 50Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_C .
3. 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.
4. "LRIP" or "L" after the part number indicates "low rate initial production"
5. and "ENG" or "E" indicates "engineering prototypes."
6. The design, manufacturing process, and specifications of this filter are subject to change.
7. 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.
8. US and international patents may apply.
9. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

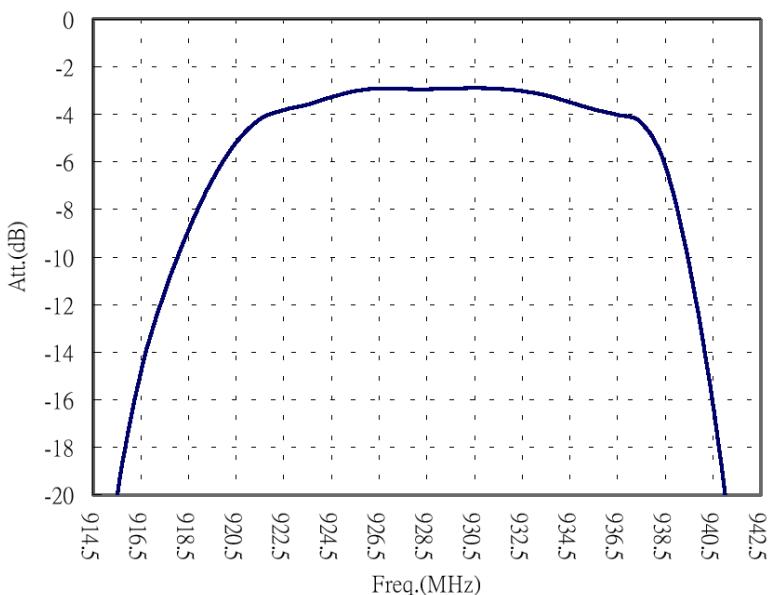
Matching Circuit



S21 Wide Span



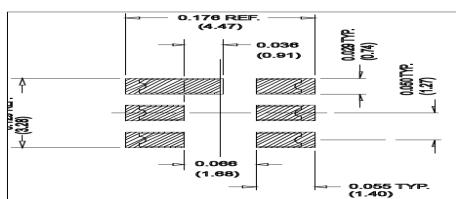
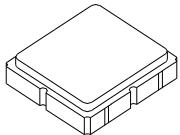
S21 Narrow Span



SM3838-6 Case

6-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint



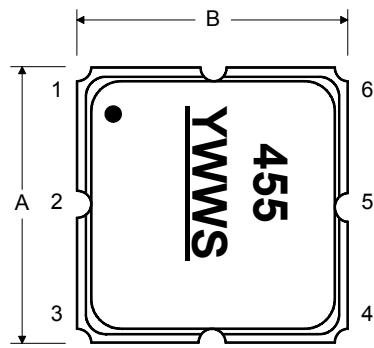
PCB Footprint

Dimension	Case Dimensions			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.60	3.80	4.0	0.14	0.15	0.16
B	3.60	3.80	4.0	0.14	0.15	0.16
C	1.30	1.50	1.70	0.05	0.06	0.067
D	0.95	1.10	1.25	0.037	0.043	0.05
E	2.39	2.54	2.69	0.090	0.10	0.110
G	0.90	1.0	1.10	0.035	0.04	0.043
H	1.90	2.0	2.10	0.75	0.08	0.83
I	0.50	0.6	0.70	0.020	0.024	0.028
J	1.70	1.8	1.90	0.067	0.07	0.075

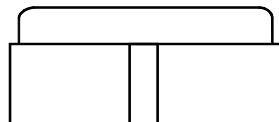
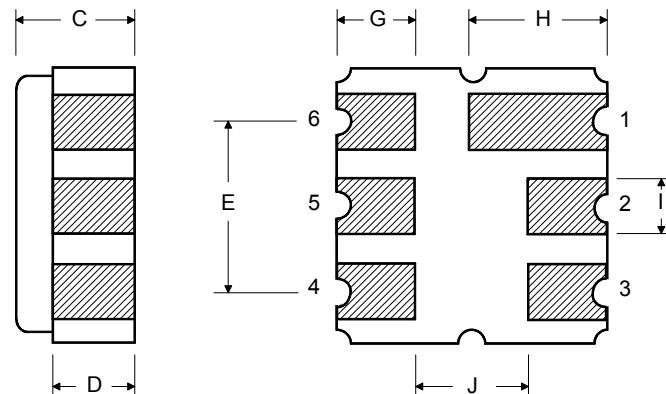
Electrical Connections	
Connection	Terminals
Port 1	Single-ended Input
Port 2	Single-ended Output
	Ground
Single-ended Operation Only	
Dot indicates Pin 1	

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_2O_3 Ceramic
Pb Free	

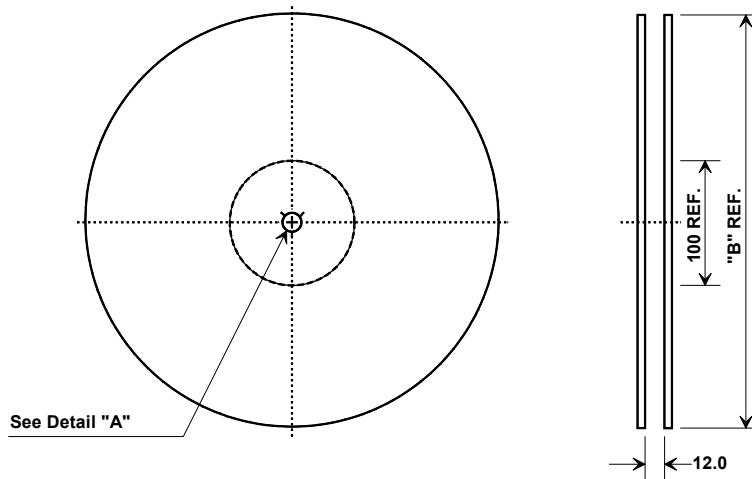
TOP VIEW



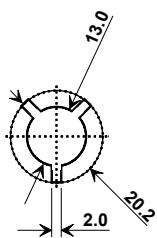
BOTTOM VIEW



Tape and Reel Specifications

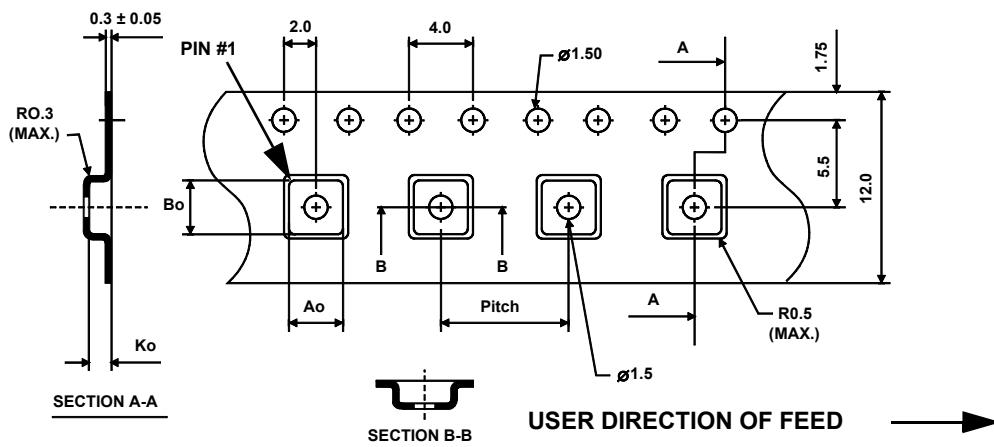


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000



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



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