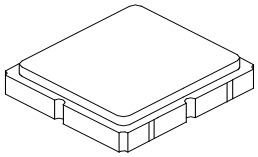
PRELIMINARY

RFM products are now Murata products.

SF2337E

827.5 MHz
SAW Notch Filter

- ***RF Filter for Mobile Communication Applications***
- ***Low Insertion Loss***
- ***3.0 x 3.0 x 1.3 mm Surface-Mount Case***



SM3030-8

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+15	dBm
Maximum DC Voltage Between any 2 Terminals	0	VDC
Storage Temperature Range	-40 to +85	°C
Operating Temperature	-40 to +85	°C
Terminating Source Impedance (single)	Z_S= 75	Ω
Terminating Load Impedance (single)	Z_L= 75	Ω
Maximum Soldering Profile	260 °C for 10 s	

Characteristic	Sym	Min	Typ	Max	Units
Nominal Center Frequency	F_C		827.5		MHz
Maximum Insertion Attenuation					
470 to 700 MHz	α max		2.0	3.0	dB
765 to 782 MHz			4.0	6.0	
782 to 785 MHz			6.0	8.0	
Attenuation					
795 to 796 MHz	α	8	12		dB
796 to 860 MHz		8	12		

Case Style	SM3030-8 3 x 3 mm Nominal Footprint
Lid Symbolization (YY=year, WW=week, D=day)	YWWS-B03

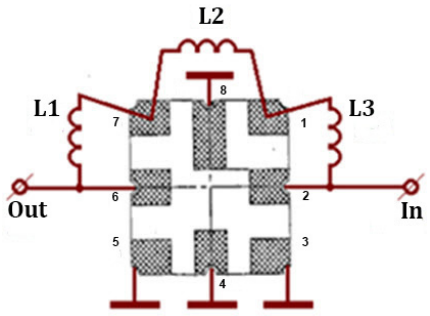
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
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. The design, manufacturing process, and specifications of this filter are subject to change.
5. 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.
6. US and international patents may apply.
7. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
8. Electrostatic Sensitive Device. Observe precautions for handling.

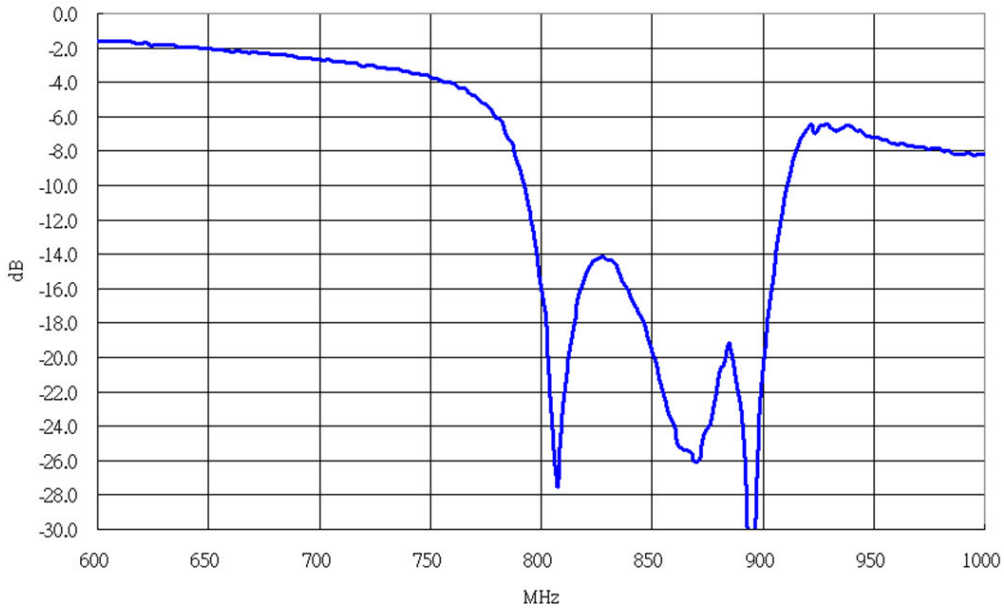
Electrical Connections

Connection	Terminals
Input	2
Output	6
Matching Port	1, 7
Ground	All others

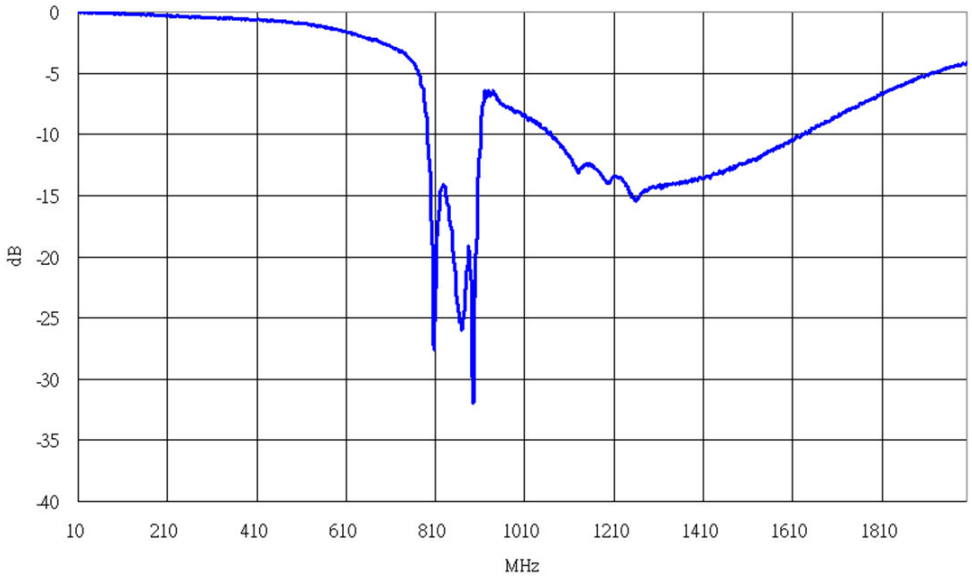


Frequency Characteristics

S21 Response: (Span 400 MHz)

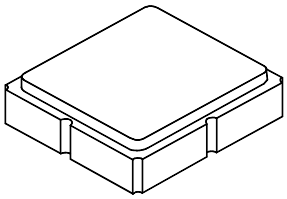


S21 Response: (Span 2 GHz)



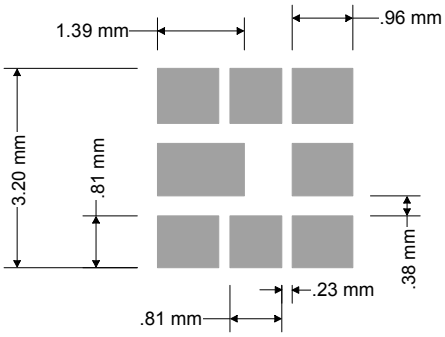
SM3030-8 Case

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



Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	3.0	-	-	0.118	-
B	-	3.0	-	-	0.118	-
C	0.99	1.00	1.10	0.038	0.039	0.043
D	-	0.75	-	-	0.029	-
E	-	0.60	-	-	0.024	-
F	-	0.60	-	-	0.024	-
G	-	1.20	-	-	0.047	-



Foot Print Dimensions

Electrical Connections

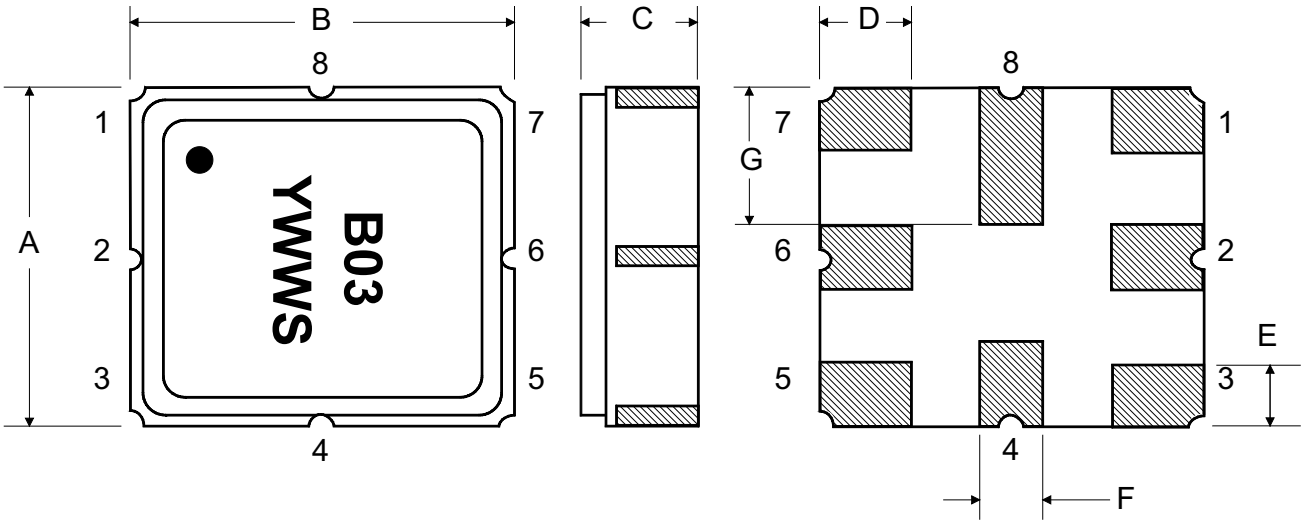
	Connection	Terminals
	Input	2
	Output	6
	Matching Port	1, 7
	Ground	All Others
Dot Indicates Pin 1		

Case Materials

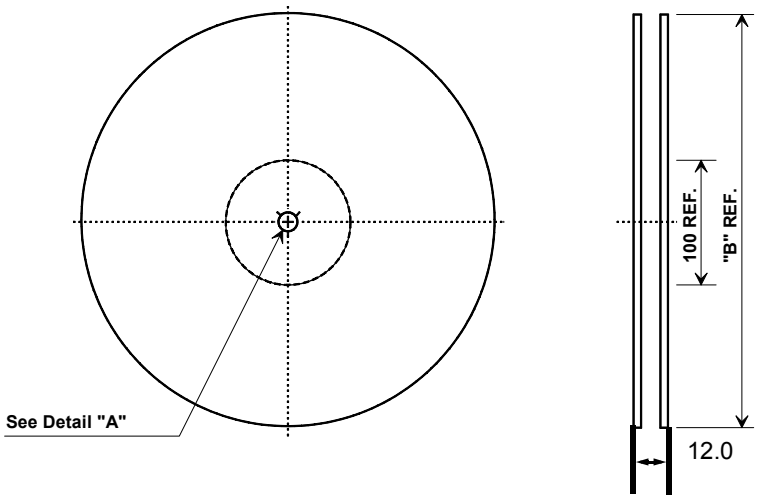
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

TOP VIEW

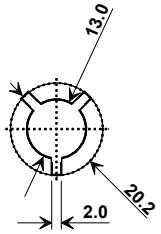
BOTTOM VIEW



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	3.3, ±0.1 mm
Bo	3.3, ±0.1 mm
Ko	1.4, ±0.1mm
Pitch	8.0 mm
W	12.0, ±0.3 mm