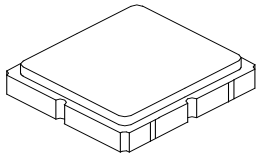
PRELIMINARY

RFM products are now Murata products.

SF2379E

742 MHz
SAW Notch Filter



SM3030-8

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

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+15	dBm
Maximum DC Voltage Between any 2 Terminals	5	VDC
Storage Temperature Range	-40 to +85	°C
Operating Temperature	-40 to +85	°C
Terminating Source Impedance (single)	Z_S= 50	Ω
Terminating Load Impedance (single)	Z_L= 50	Ω
Maximum Soldering Profile	260 °C for 10 s	

Characteristic	Sym	Min	Typ	Max	Units
Nominal Center Frequency	F_C		742		MHz
Minimum Insertion Attenuation (470 to 600 MHz)	α min		4	5	dB
Maximum Insertion Attenuation	α max				dB
47 to 68 MHz			0.5	1.0	
174 to 230 MHz			0.5	1.0	
470 to 600 MHz			4.0	5.0	
600 to 660 MHz			7.0	9.0	
Attenuation	dB				dB
694 to 790 MHz		15	18		
1210 to 1610 MHz		5	8		
1610 to 1990 MHz		3	5		

Case Style	SM3030-8 3 x 3 mm Nominal Footprint
Lid Symbolization (YY=year, WW=week, D=day)	YWWS-6G

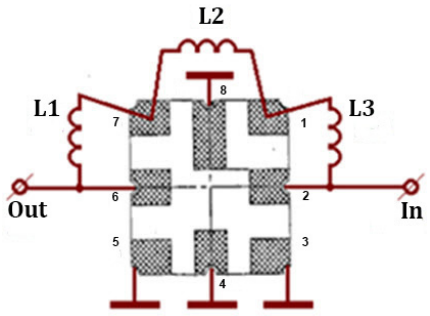
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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.

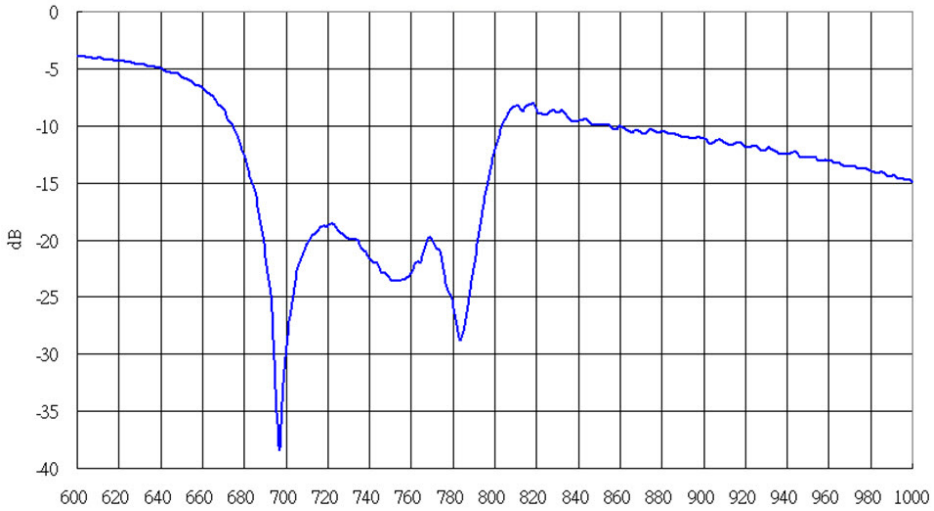
Electrical Connections

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

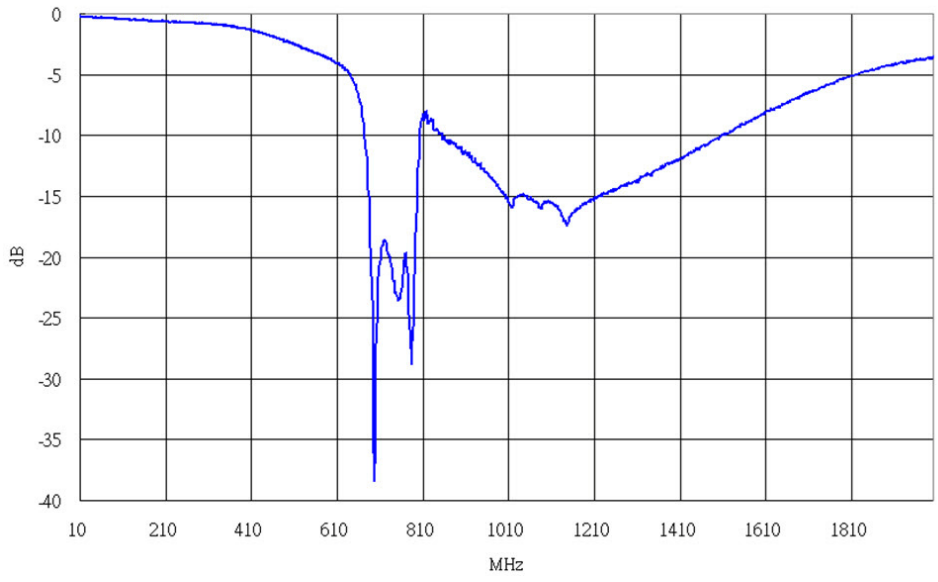


Frequency Characteristics

S21 Response: (Span 400 MHz)

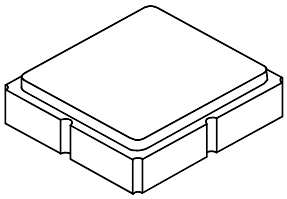


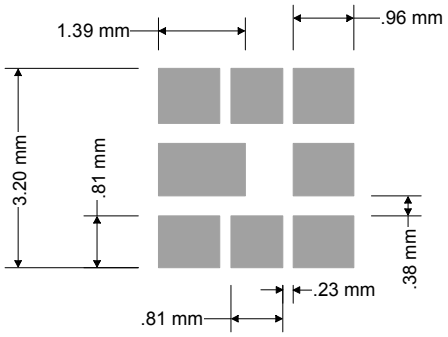
S21 Response: (Span 2 GHz)



SM3030-8 Case

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





Foot Print Dimensions

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	-

Electrical Conections

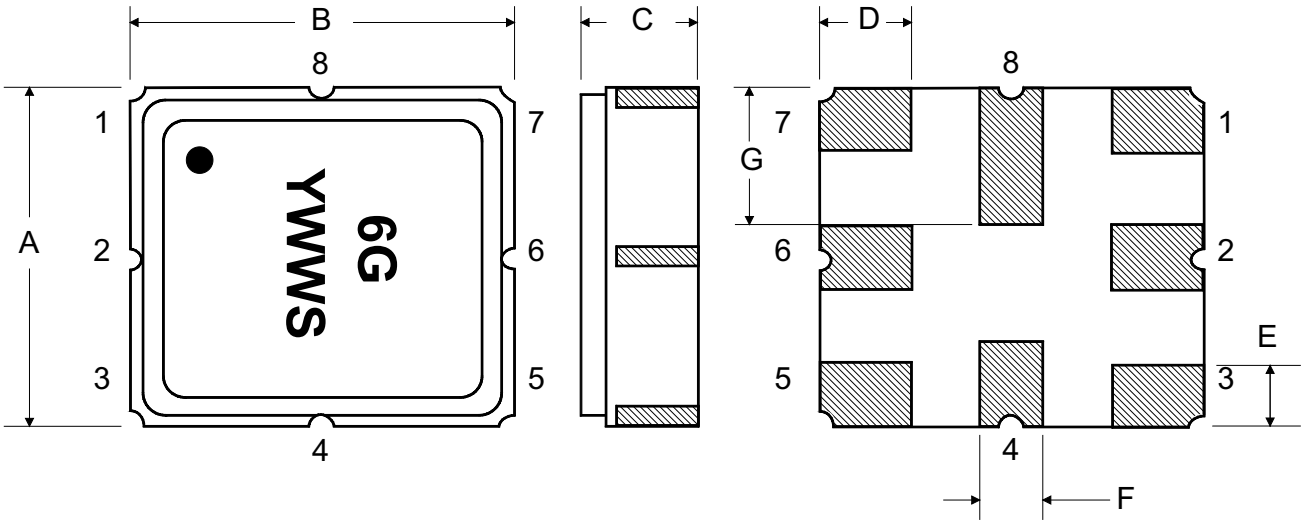
	Connection	Terminals
	Input	2
	Output	6
	Matching Port	1, 7
	Ground	All Others
Dot Indicates Pin 1		

Case Materials

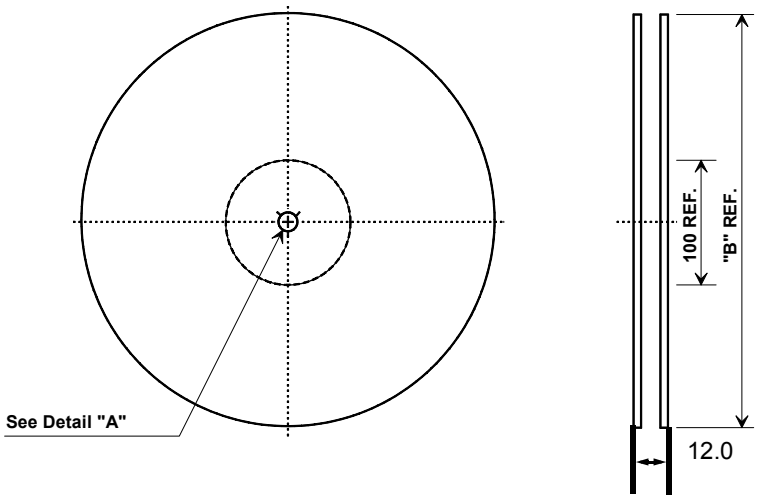
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

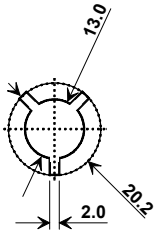
TOP VIEW

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