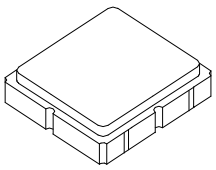
Preliminary

RFM products are now Murata products.

SF2373E

1540 MHz SAW Filter

- ***Low-loss RF SAW Filter***
- ***Miniature 3 x 3 mm SMD Package***
- ***Balanced operation***
- ***Complies with Directive 2002/95/EC (RoHS)***



SM3030-8

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-grounded Terminal	3	V
Operating Temperature Range	-40 to +100	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile, 5 cycles/10 seconds maximum	265	°C

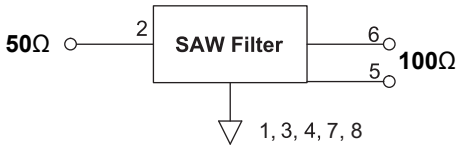
Electrical Characteristics

Characteristic - @25°C	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			1540		MHz
Insertion Loss, 1520 to 1560 MHz	IL				5.5	dB
Group Delay, 1520 to 1560 MHz					20	nS
Amplitude Ripple, 1520 to 1560 MHz				0.7	2.0	dB_{P-P}
Return Loss 1520 to 1560 MHz			10			dB
Attenuation 0 dB Reference:						dB
<1000 MHz			-40			
1000 to 1500 MHz			-35			
1580 to 2480 MHz			-35			
2480 to 4860 MHz			-40			
4860 to 6000 MHz			-30			
>6000 MHz			-25			
Temperature Coefficient				-30		ppm/°C

Case Style		SM3030-8 3.0 x 3.0 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator		6A, YWWS
Standard Reel Quantity	Reel Size 7 inch	500 Pieces/Reel
	Reel Size 13 inch	

Electrical Connections

Connection	Terminals
Input	2 - 50 Ω
Output	5, 6 - 100 Ω differential
Case Ground	All others

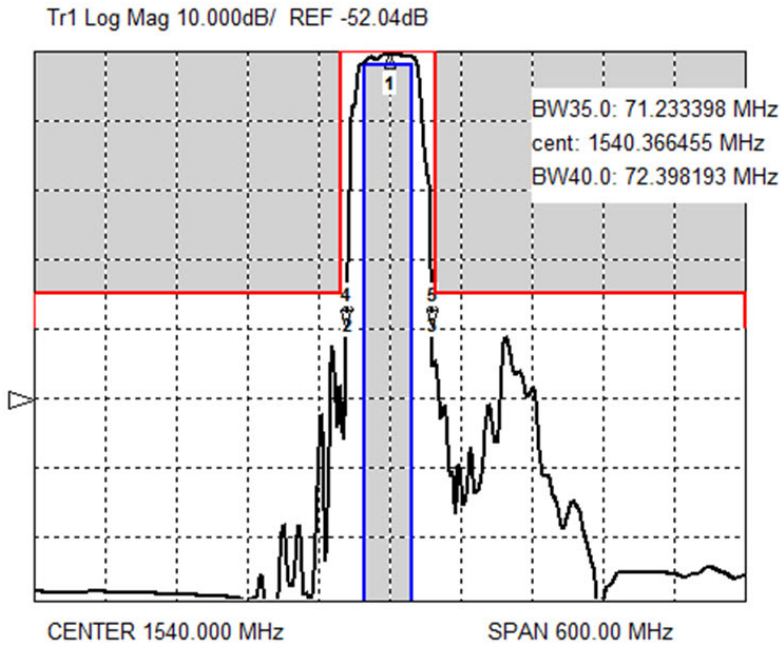


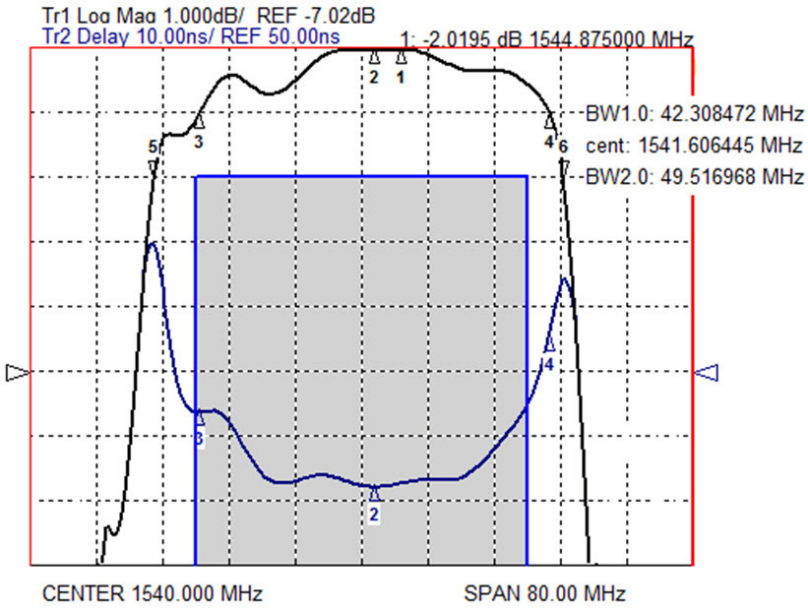
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

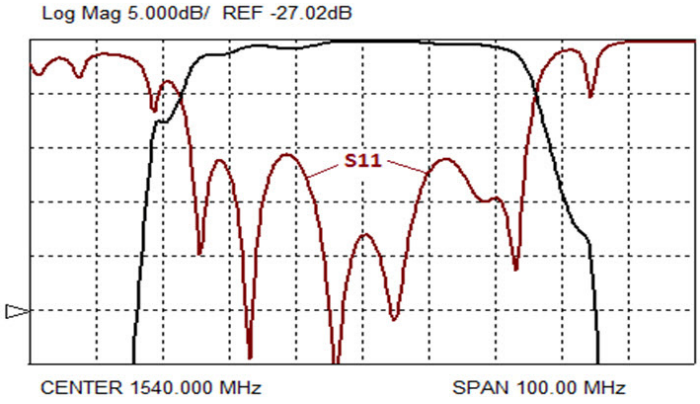
NOTES:

1. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
2. 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.
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. 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.
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.

Filter Response Plots

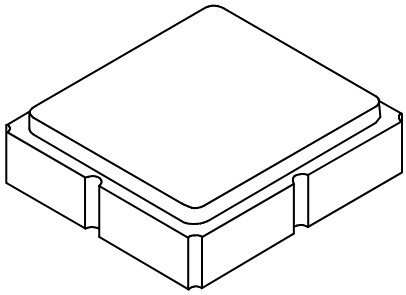




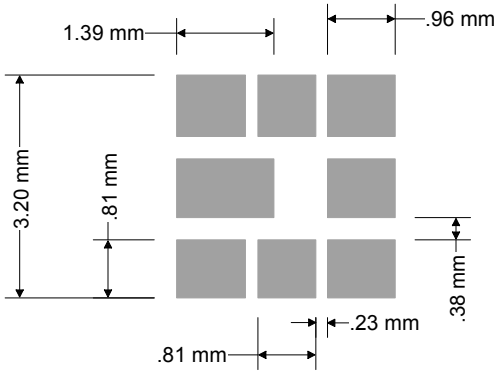


SM3030-8 Case

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

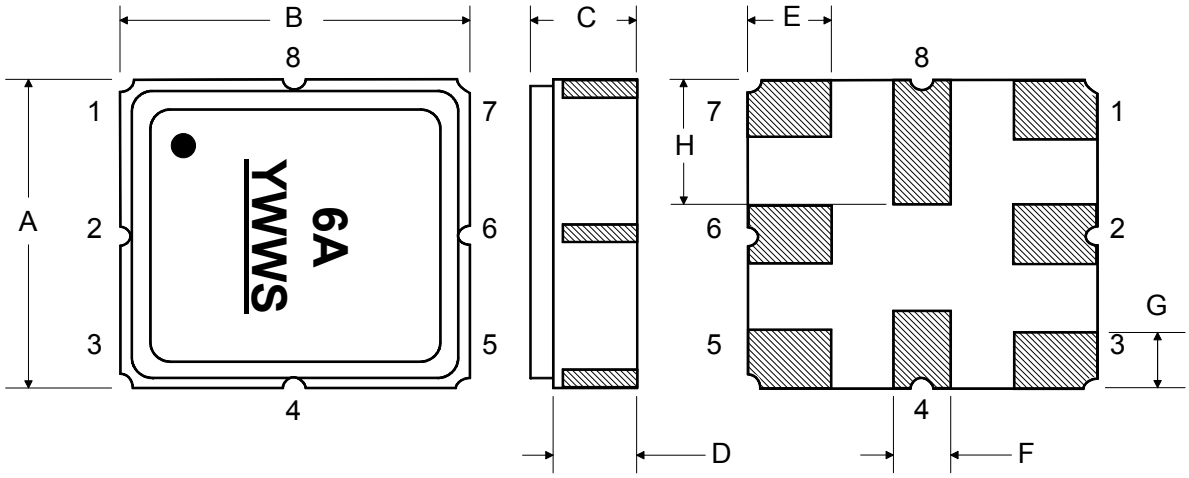


Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	1.14	1.27	1.40	0.045	0.050	0.055
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052

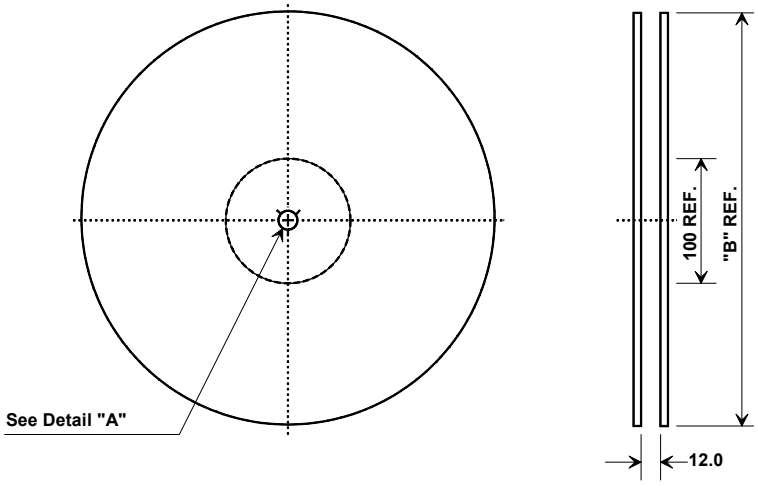


Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	

TOP VIEW **BOTTOM VIEW**



Tape and Reel Specifications



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

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	3.5 mm
Bo	3.5 mm
Ko	1.40 mm
Pitch	8.0 mm
W	12.0 mm