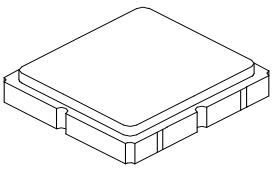
muRata
INNOVATOR IN ELECTRONICS

SF1192B

1842.5 MHz SAW Filter

- ***RF Filter for Mobile Communication Applications***
- ***No Matching Circuit Required***
- ***3.0 x 3.0 x 1.3 mm Package***
- ***Complies with Directive 2011/65/EU (RoHS)***



SM3030-6

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+10	dBm
DC voltage between Terminals	0	VDC
Operable Temperature Range	-45 to +125	°C
Storage Temperature	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Temperature	260°C for 30 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal Operating Frequency		f_C			1842.5		MHz
Passband	Insertion Loss across Fc+/ -37.5 MHz	IL			2.2	3.8	dB
	Amplitude Ripple p-p across Fc+/ -37.5 MHz				1.3	2.3	dB
Attenuation	1542.5 ~ 1600 MHZ			20.0	24.5		dB
	1600 ~ 1710 MHZ			22.0	25.0		dB
	1710 ~ 1785 MHZ			10.0	23.5		dB
	1920 ~ 2142.5 MHZ			25.0	28.0		dB
VSWR across Fc +/ -37.5 MHz					1.9	2.6	
Source impedance		Z_S			50		Ω
Load impedance		Z_L			50		Ω
Specification Temperature Range		T_A		-30		+85	°C

Case Style	SM3030-6 3 x 3 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=Shift)	454 YWWS
Standard Reel Quantity Reel Size 7 Inch	500 Pieces Per Reel
Reel Size 13 Inch	3000 Pieces Per Reel

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others

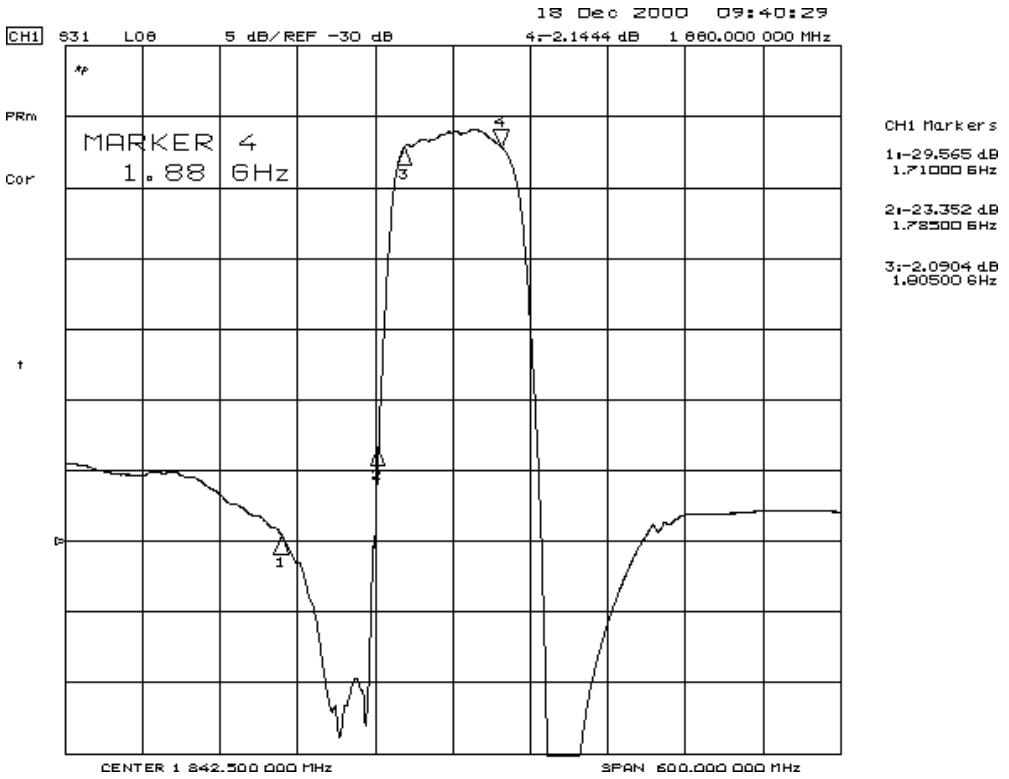
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

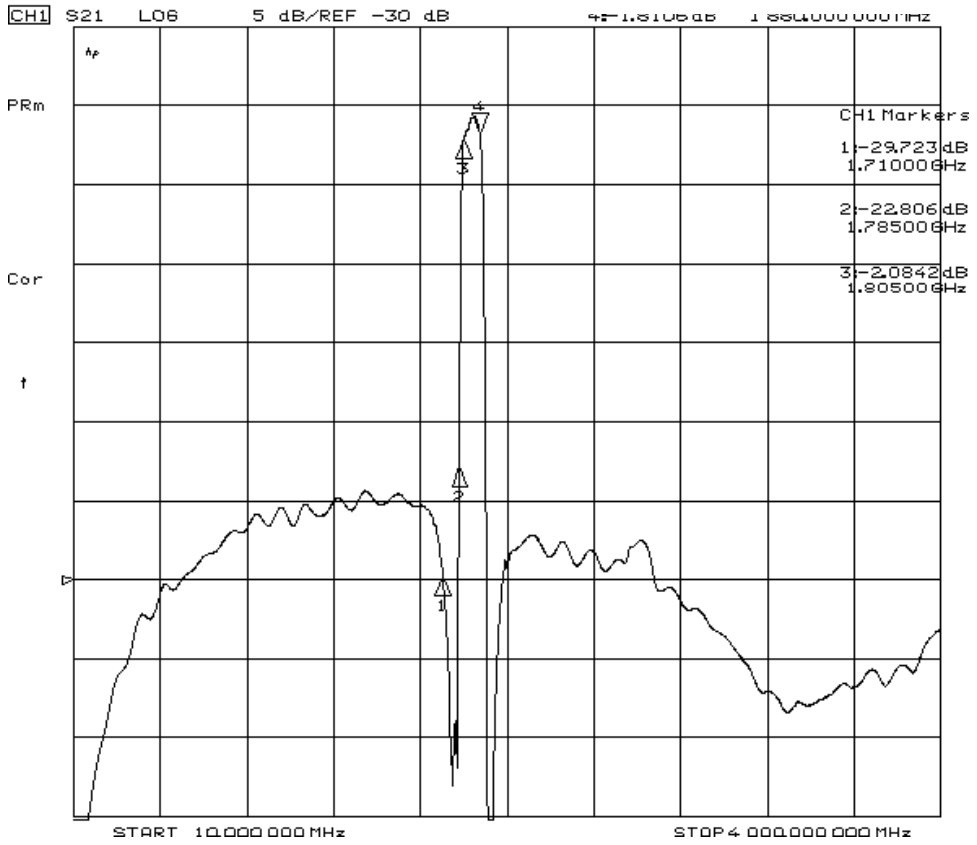
NOTES:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 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. 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

Frequency Characteristics:

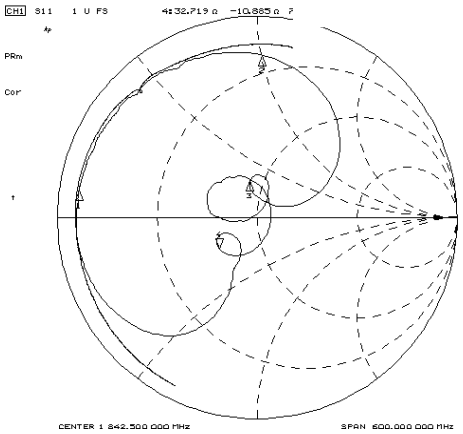
Transfer Function

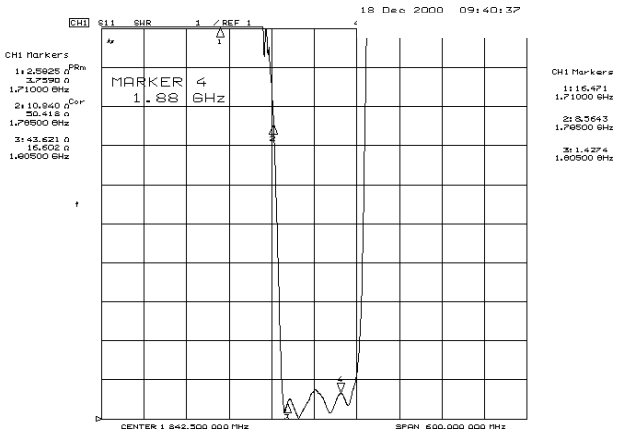




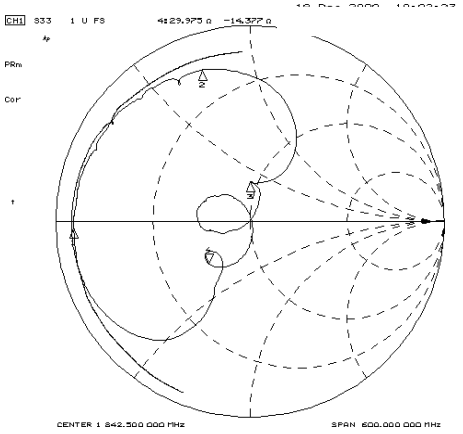
Reflections Functions:

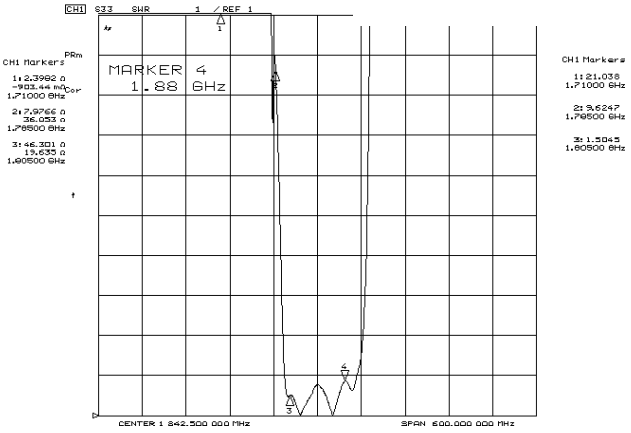
S11 VSWR



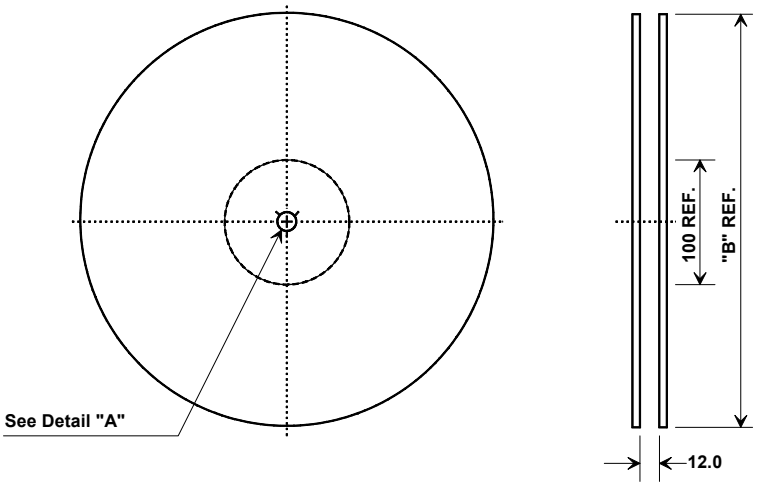


S22 VSWR

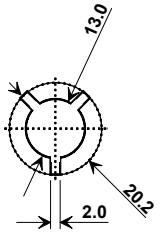


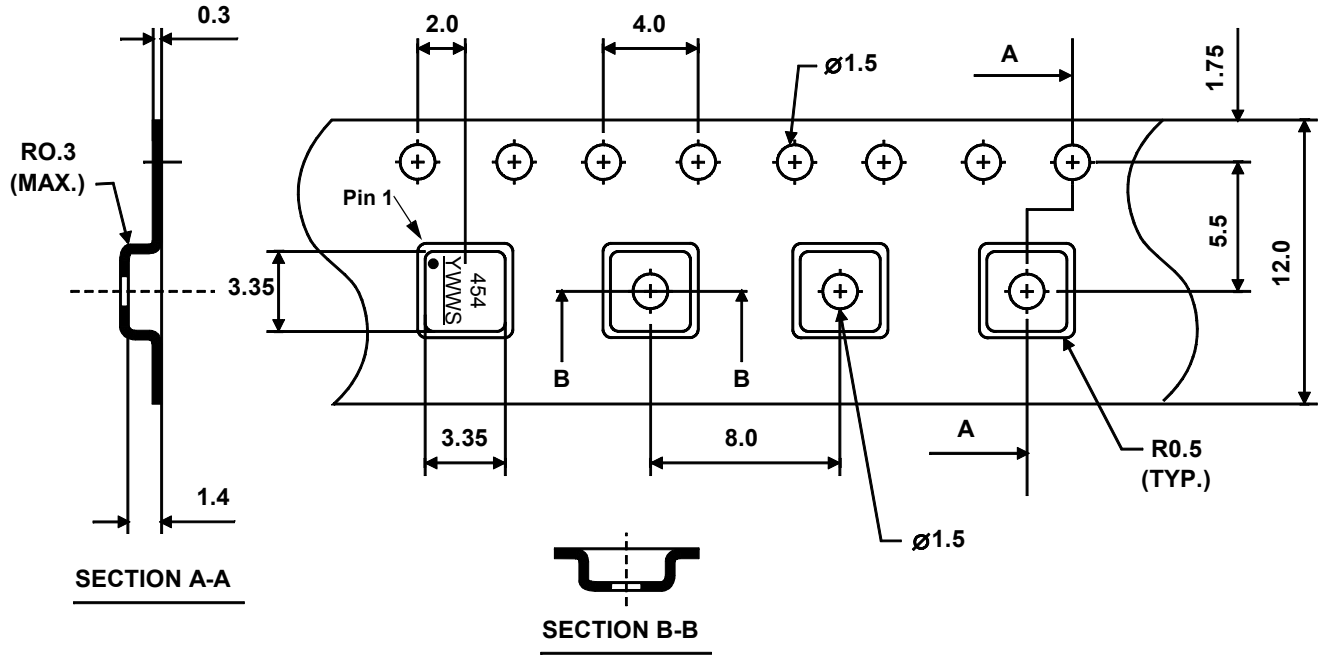


Tape and Reel Specifications



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

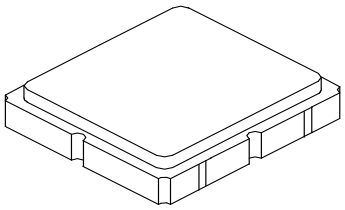




SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case

3.0 X 3.0 mm Nominal Footprint



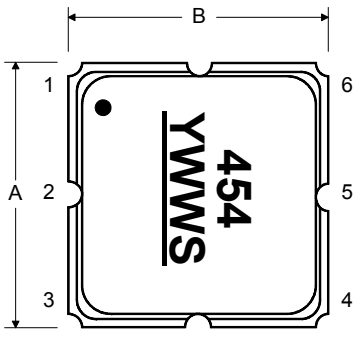
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.50	1.63	0.054	0.059	0.064
I	0.47	0.60	0.73	0.019	0.024	0.029
J	1.17	1.30	1.43	0.046	0.051	0.056

Electrical Connections

Connection		Terminals
Port 1	Single Ended Input	2
Port 2	Single Ended Output	5
	Ground	All others
Single Ended Operation Only		
Dot indicates Pin 1		

TOP VIEW



BOTTOM VIEW