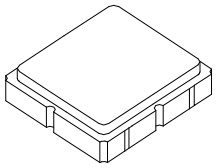
muRata
INNOVATOR IN ELECTRONICS

SF2002B-2

942.5 MHz SAW Filter

- ***RF Filter for EGSM***
- ***High Attenuation Design***
- ***No Matching Circuit Required***
- ***3.0 x 3.0 x 1.3 mm Package***



SM3030-6

Absolute Maximum Ratings

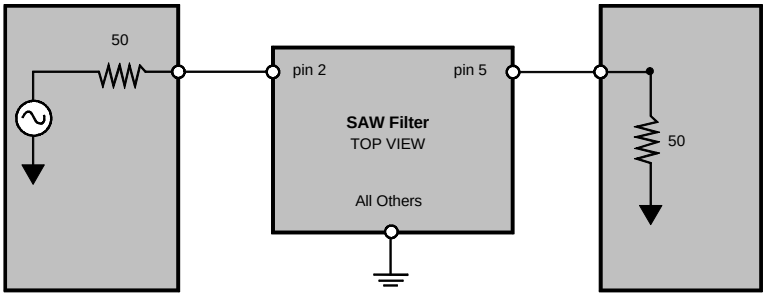
Rating	Value	Units
Maximum Input Power	+15	dBm
DC voltage between Terminals	-3 ~ +3	VDC
Operating Temperature	-30 to +80	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Operating Frequency	f_C			942.5		MHz
Passband Insertion Loss (925~960 MHz)	IL			2.8	4.0	dB
Amplitude Ripple (925~960 MHz)				1.1	2.3	dB
Attenuation (Reference level from 0 dB)						
10~800 MHZ			50	63		dB
800~880 MHZ			40	48		dB
880~905 MHZ			35	43		dB
980~982 MHZ			20	27		dB
982~1005 MHZ			23	28		dB
1005~1025 MHZ			29	33		dB
1025~1760 MHZ			40	50		dB
1760~2300 MHZ			30	41		dB
2300~3000 MHZ			20	28		dB
Input Z_{IN}				50		Ω
Output Z_{OUT}				50		Ω
Case Style	SM3030-6 3 x 3 mm Nominal Footprint					
Lid Symbolization (Y=year, WW=week, S=Shift)	464, YWWS					

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others

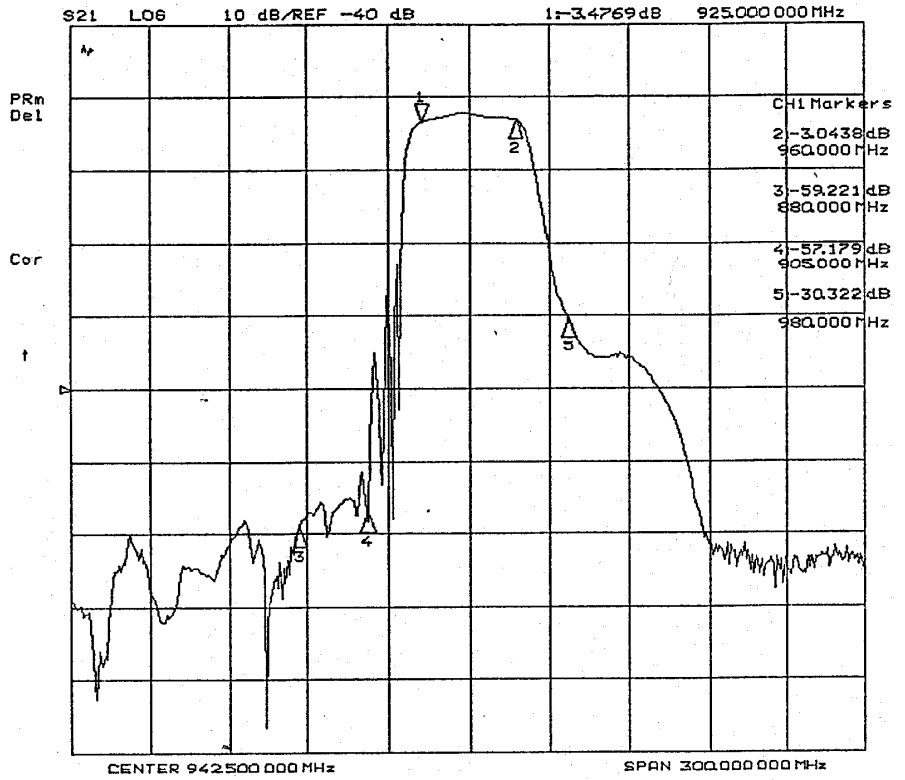


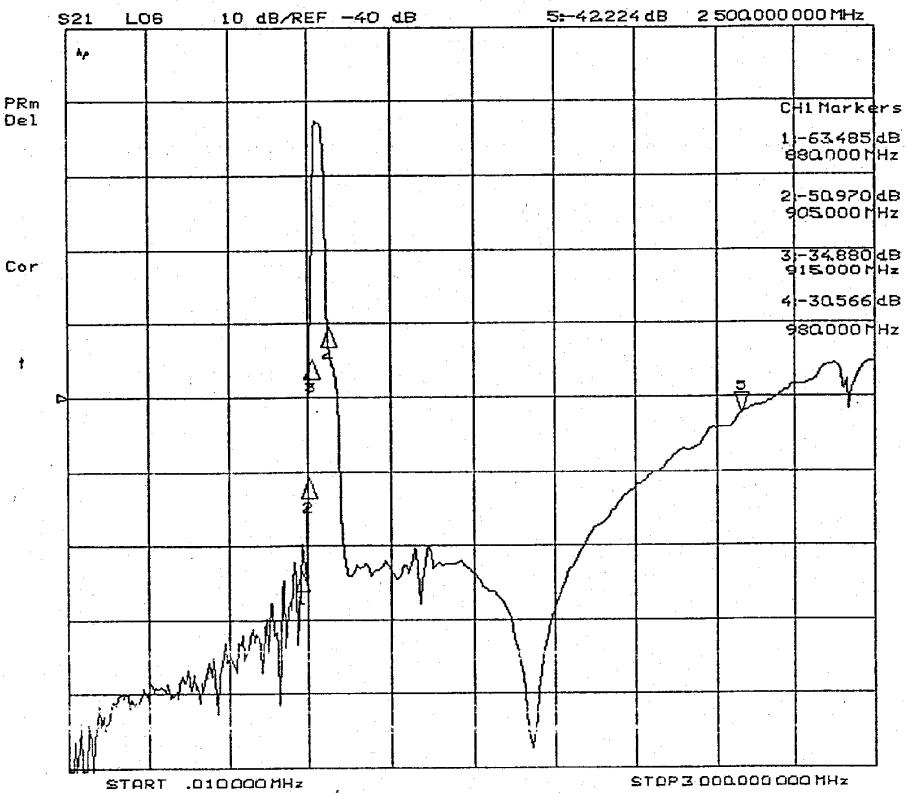
NOTES:

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. The design, manufacturing process, and specifications of this filter are subject to change.
3. US and international patents may apply.
4. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
5. Electrostatic Sensitive Device. Observe precautions for handling.

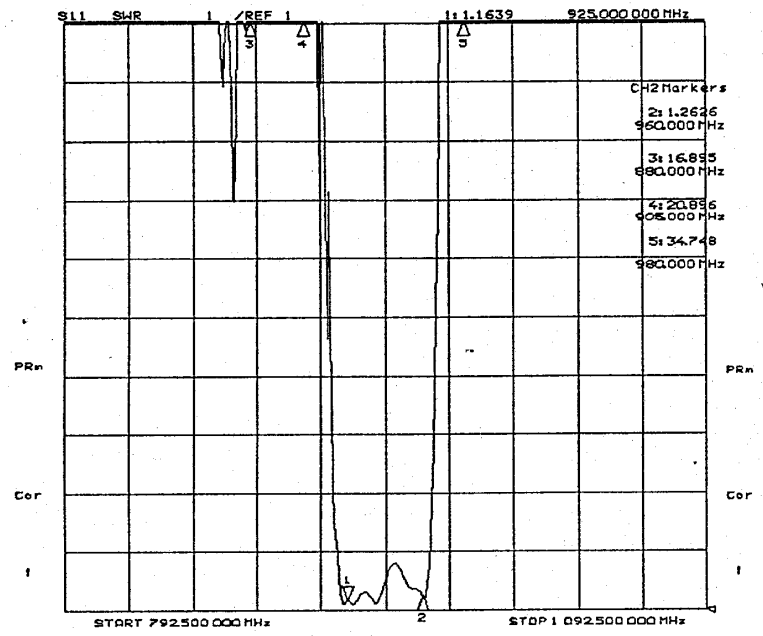
FREQUENCY CHRACTERISTICS:

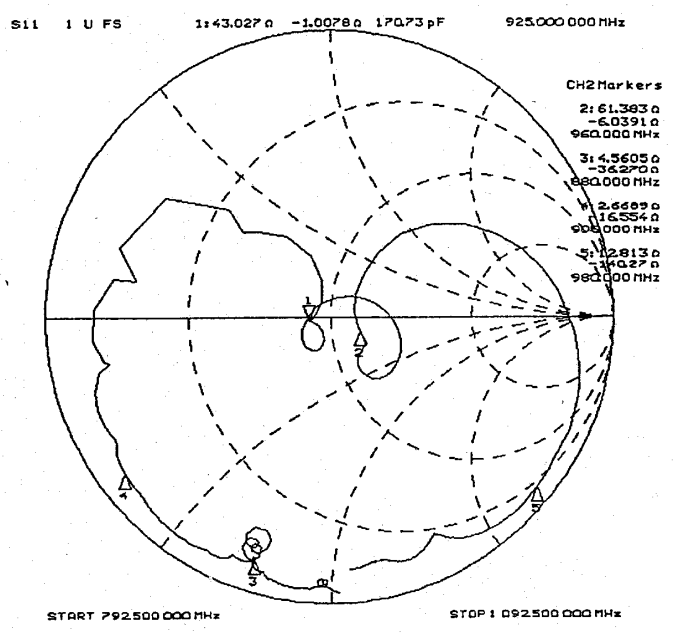
1. wideband response:



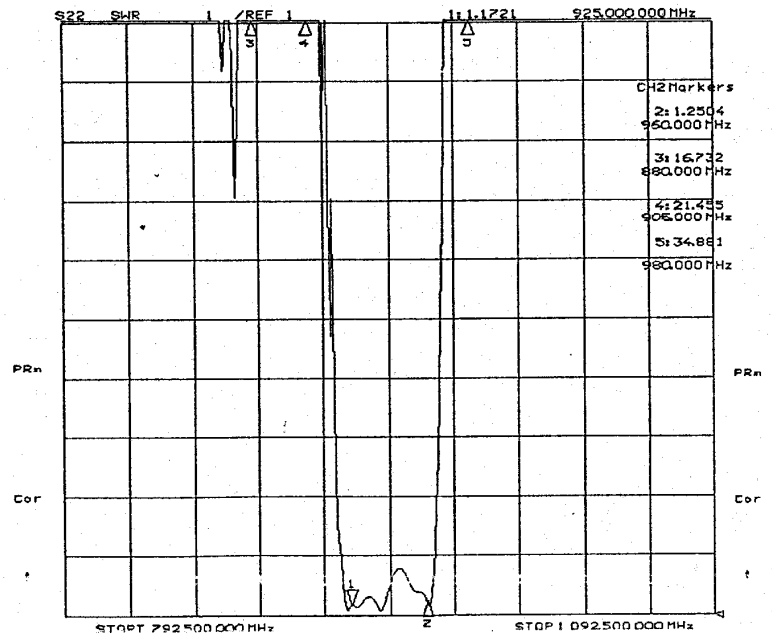


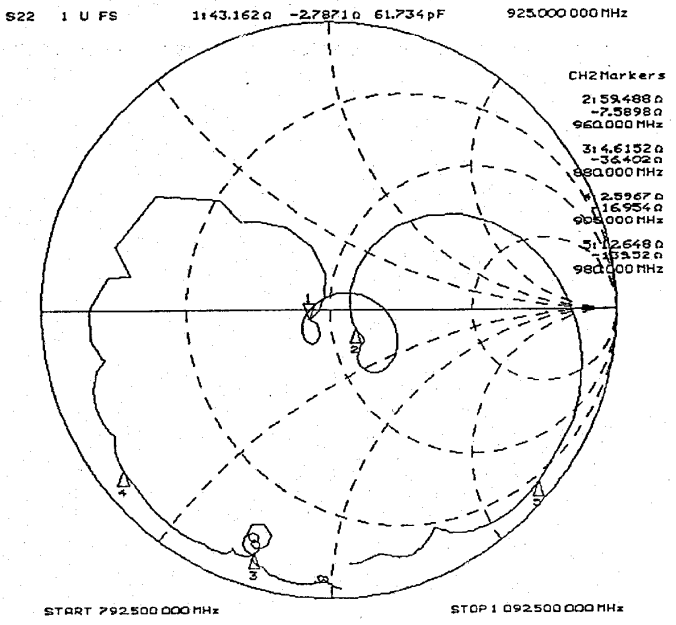
S11 Return Loss & VSWR:



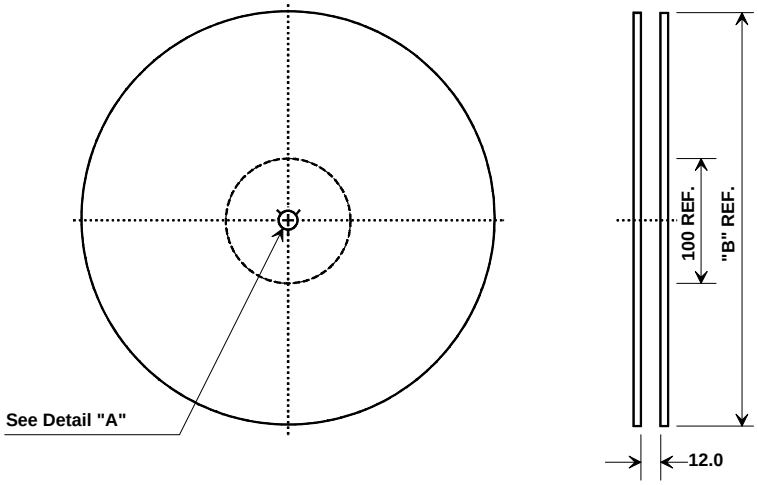


S22 Return Loss & VSWR:

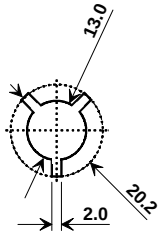




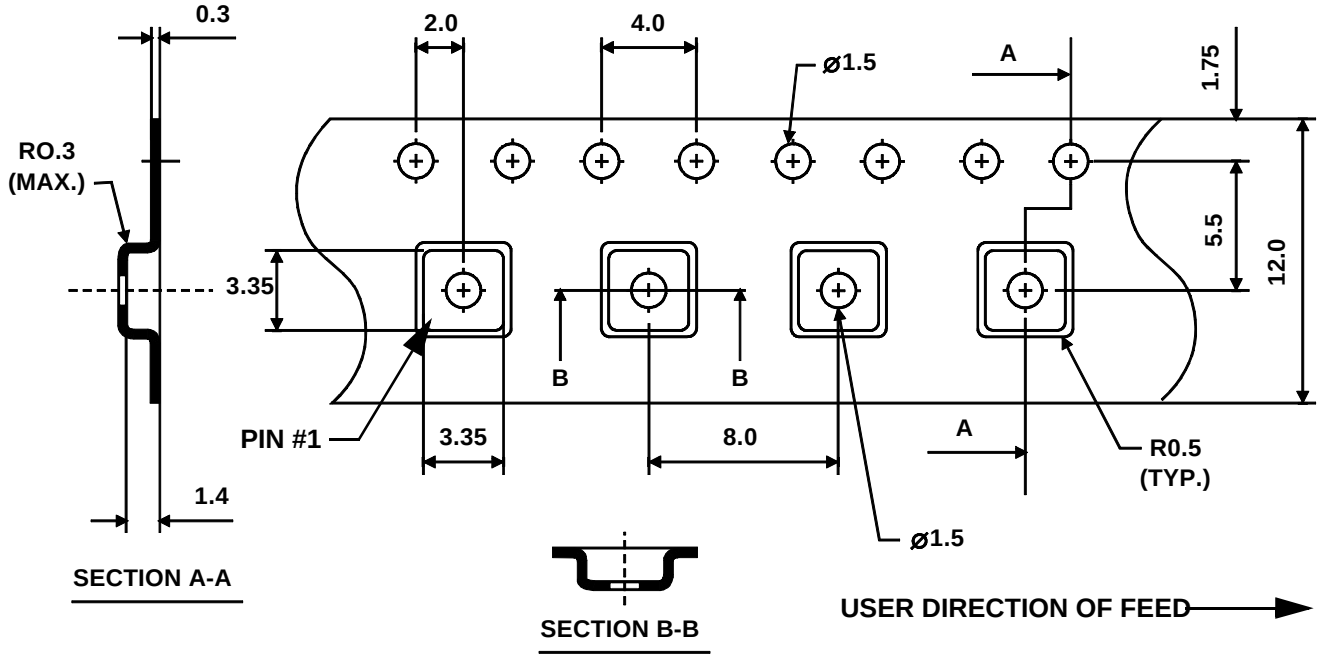
Tape and Reel Specifications



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

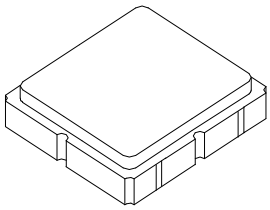


COMPONENT ORIENTATION



SM3030-6 Case

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



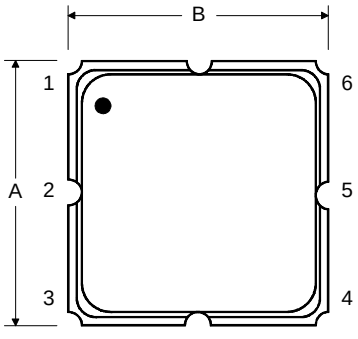
Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A		3.0			0.118	
B		3.0			0.118	
C		1.3			0.051	
D		0.9			0.035	
E		2.54			0.100	
F		1.6			0.063	
G		0.85			0.033	
H		1.5			0.059	
I		0.6			0.024	
J		1.3			0.051	

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