

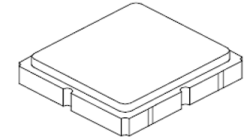


**THE DATASHEET OF
SF2002B-2**



SF2002B-2

942.5 MHz SAW Filter



SM3030-6

- **RF Filter for EGSM**
- **High Attenuation Design**
- **No Matching Circuit Required**
- **3.0 x 3.0 x 1.3 mm Package**
- **Complies with directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

Absolute Maximum Ratings

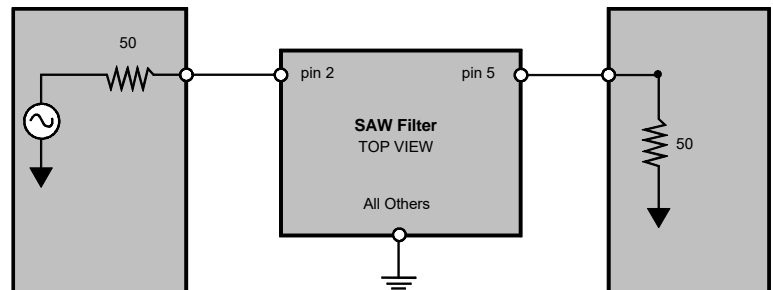
Rating	Value	Units
Maximum Input Power	+15	dBm
DC voltage between Terminals	-3 ~ +3	VDC
Operating Temperature	-30 to +80	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Operating Frequency	f_c			942.5		MHz
Passband		Insertion Loss (925~960 MHz)		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, <u>YWWS</u>					

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others



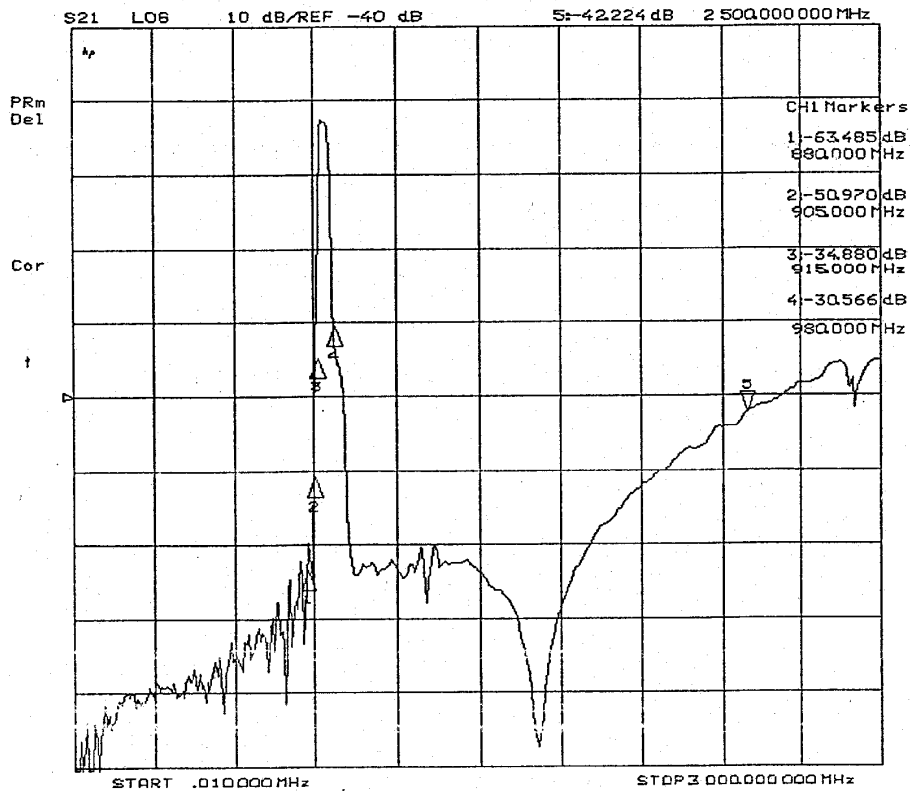
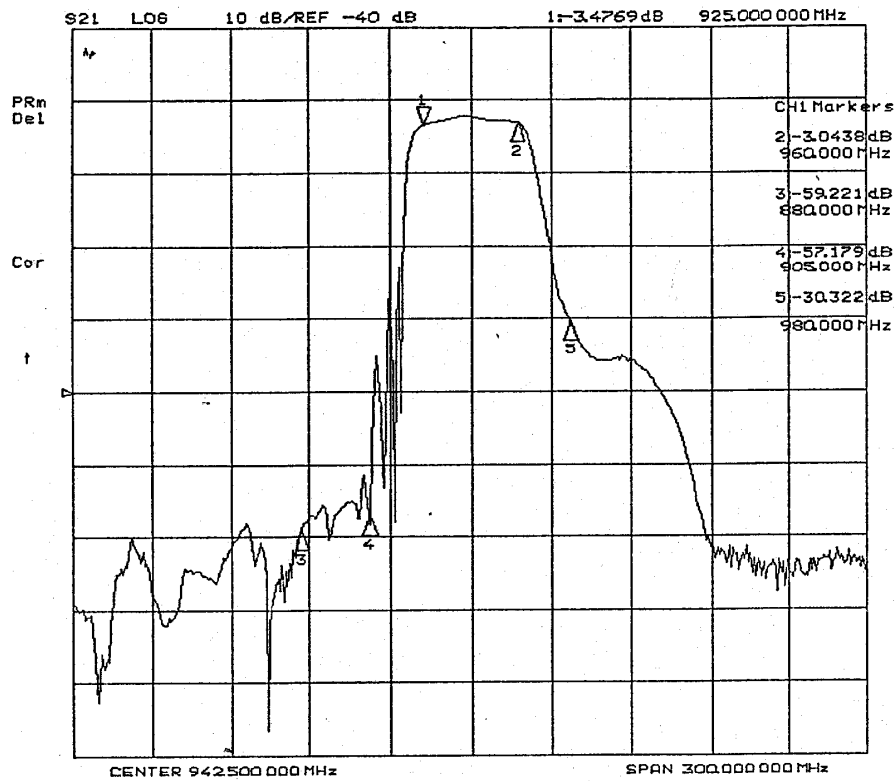
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

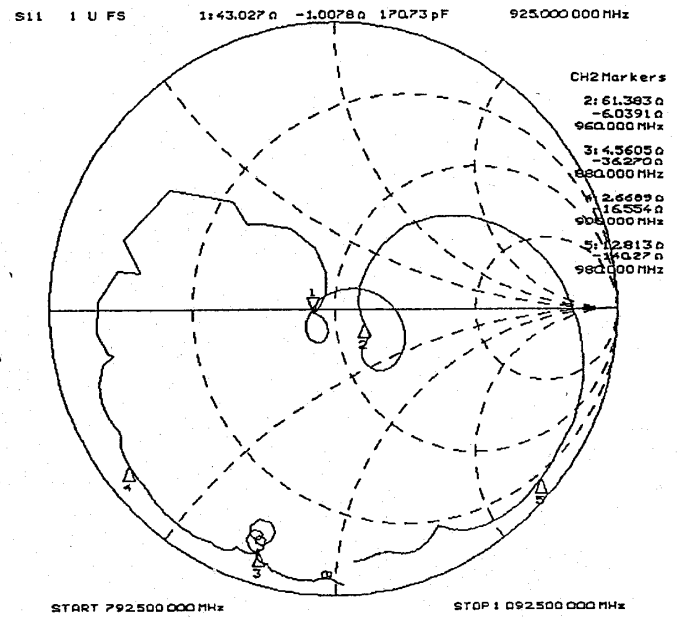
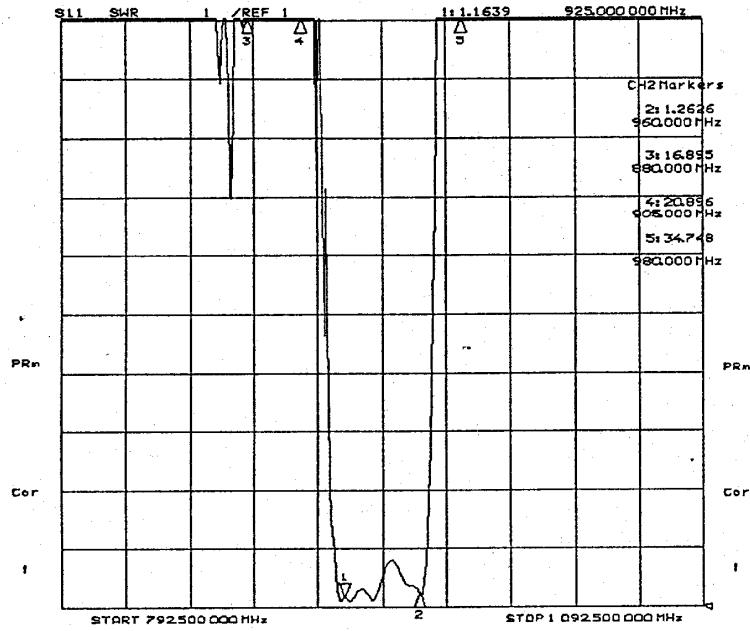
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

FREQUENCY CHARACTERISTICS:

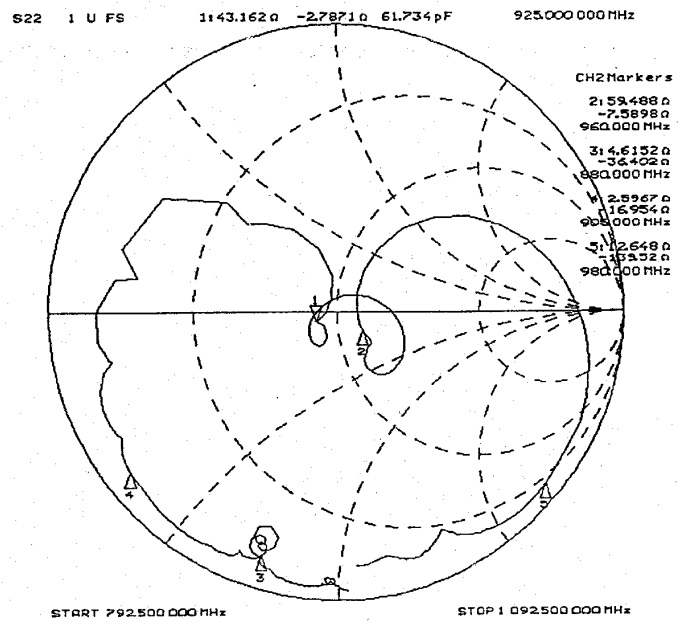
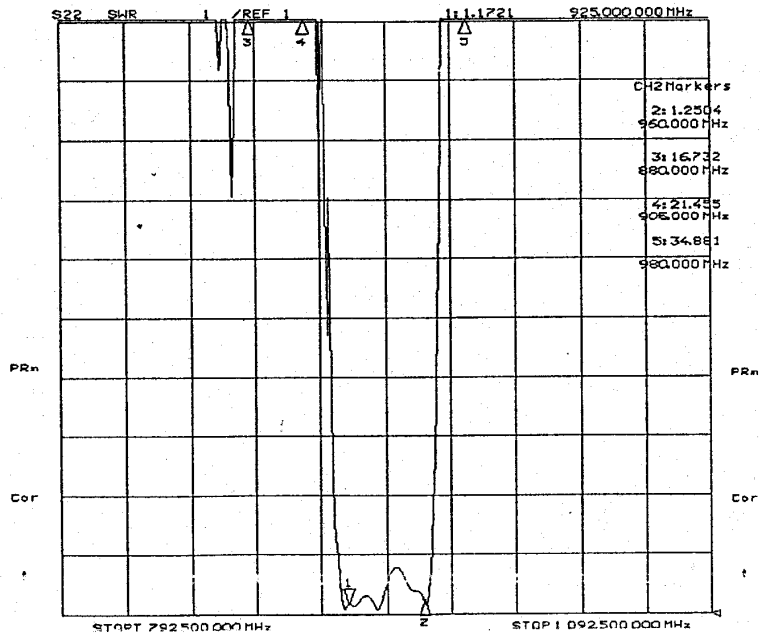
1. wideband response:



S11 Return Loss & VSWR:

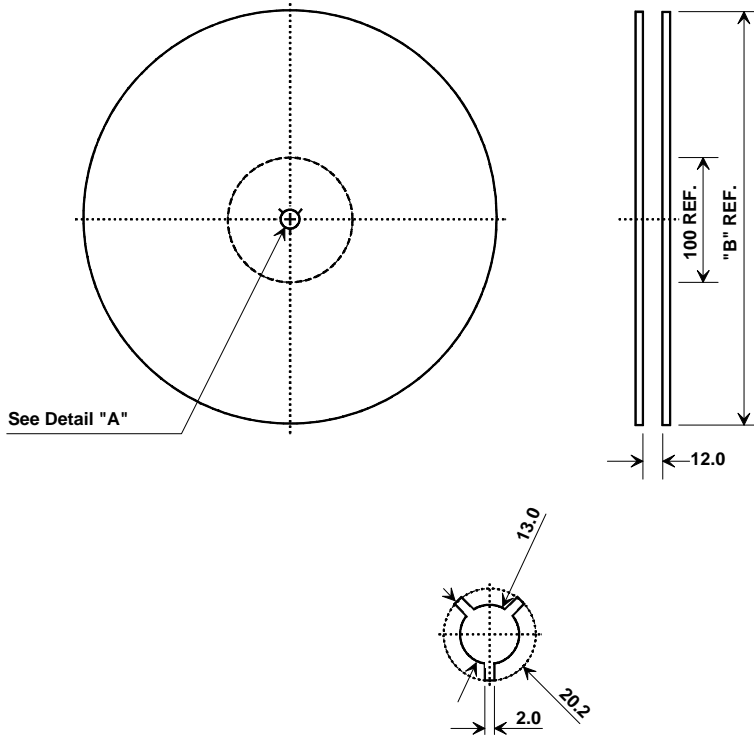


S22 Return Loss & VSWR:



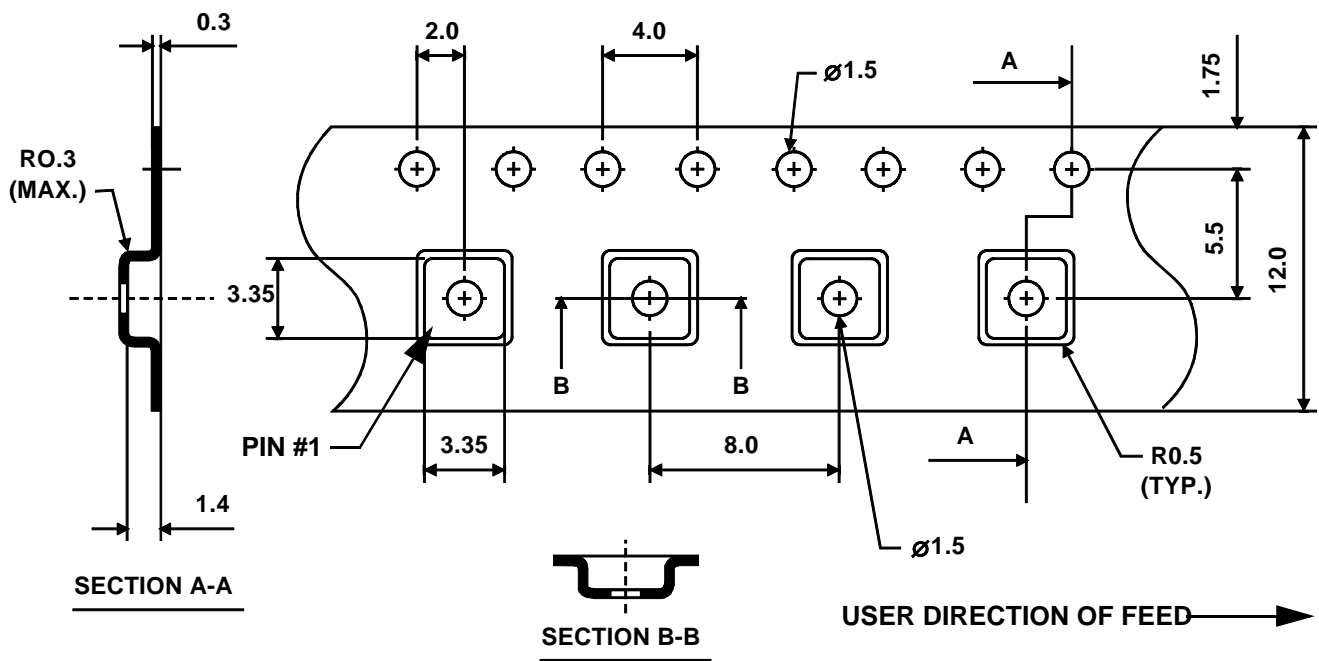
Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA481



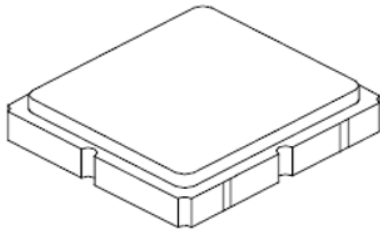
"B "		Quantity Per Reel
Nominal Size		
Inches	millimeters	
7	178	500
13	330	3000

COMPONENT ORIENTATION



SM3030-6 Case

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



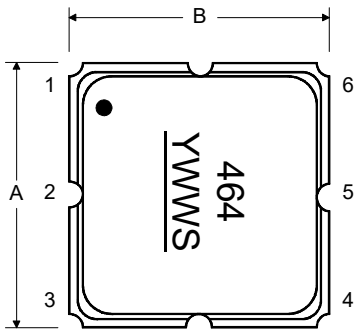
Case Dimensions

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	

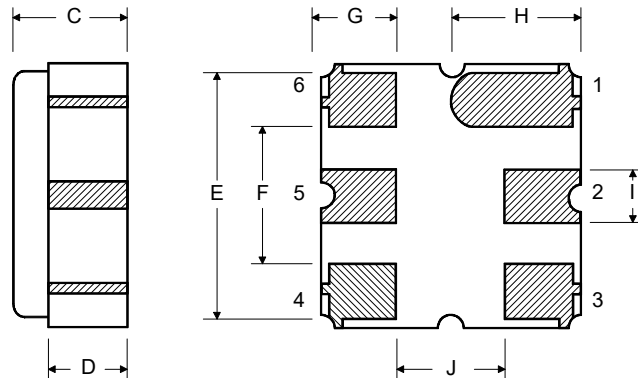
Electrical Connections

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

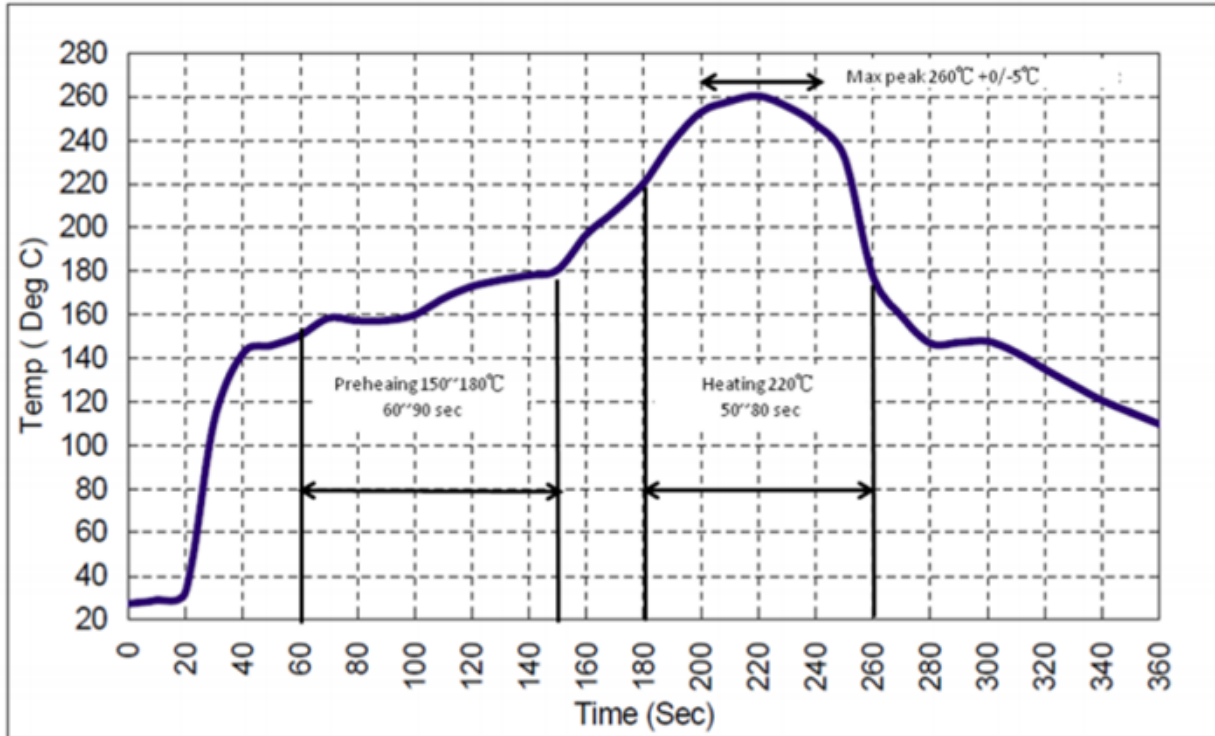


BOTTOM VIEW





Recommended Reflow Profile

1. Preheating shall be fixed at 150~180° for 60~90 seconds.
2. Ascending time to preheating temperature 150° shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C peak (10 seconds.)
4. Time: 5 times maximum



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-  [RF Monolithics, Inc Information](#)

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