

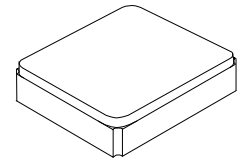
Preliminary



SF1183G

881.5 MHz SAW Filter

- **RF Filter for Cellular Application**
- **2.5 x 2.0 x 1.05 mm Surface-Mount Case**
- **No Matching Circuit Required**
- **Complies with Directive 2002/95/EC (RoHS)**



SM2520-4

Absolute Maximum Ratings

Rating	Value	Units
Input Power Level	15	dB
DC voltage	-5 ~ +5	V
Storage Temperature	-40 to +85	°C
Max Soldering Profile	265°C for 10 s	

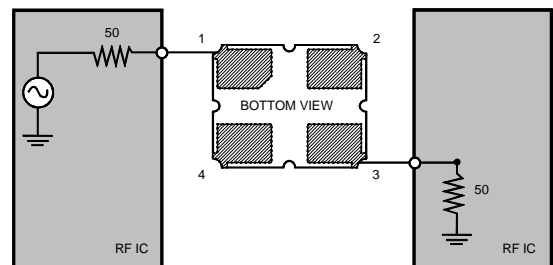
Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c		881.5			MHz
Insertion Loss	869 ~ 894 MHz	IL		2.1	2.8	dB
Amplitude Ripple (p-p)	869 ~ 894 MHz			0.6	1.2	
Return loss	869 ~ 894 MHz		9.0	12.0		
Attenuation (Reference level from 0 dB)	DC ~ 840 MHz		45	50		dB
	840 ~ 851 MHz		38	45		
	914 ~ 924 MHz		20	26		
	924 ~ 950 MHz		34	39		
	950 ~ 997 MHz		35	48		
	997 ~ 2200 MHz		40	48		
	2200 ~ 3000 MHz		27	33		
Tx band suppression	824 ~ 849 MHz		38	45		
Source impedance	Z_S			50		Ω
Load impedance	Z_L			50		Ω
Operating Temperature	T_A		-25		+80	°C

Single Ended Input / Output, Impedance match	No matching network required for operation at 50 ohms
Lid Symbolization (2K=SF1183G Y=year, W=week)	2K, YW

Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	All others

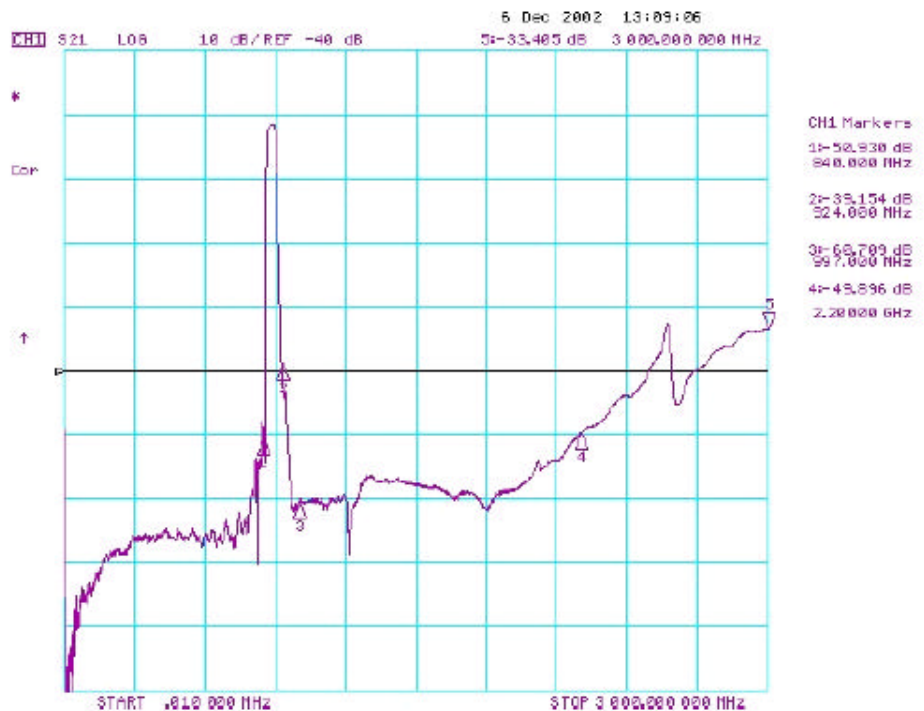
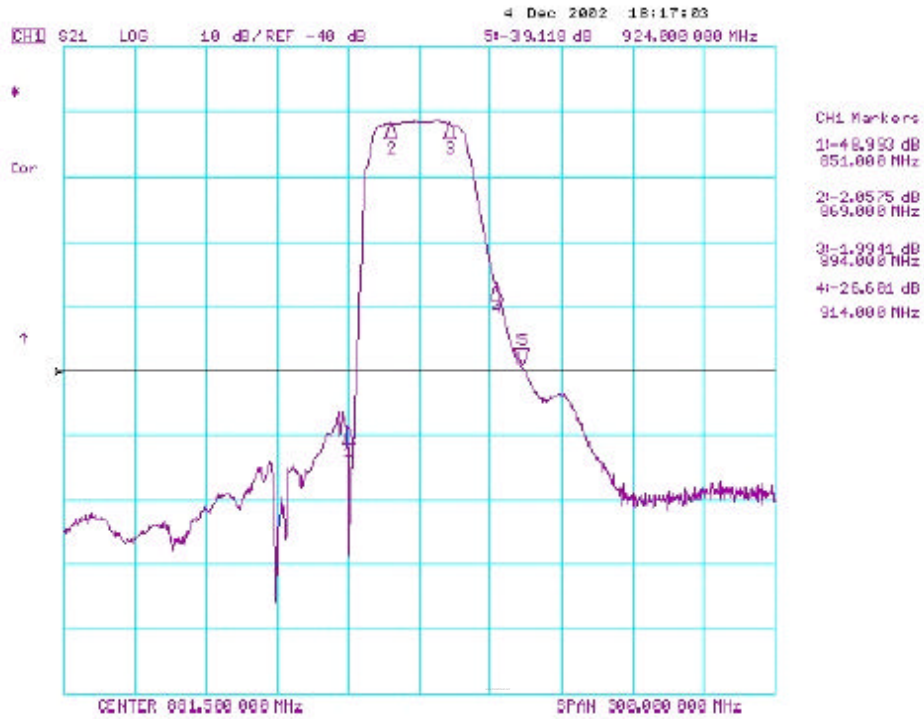


Notes:

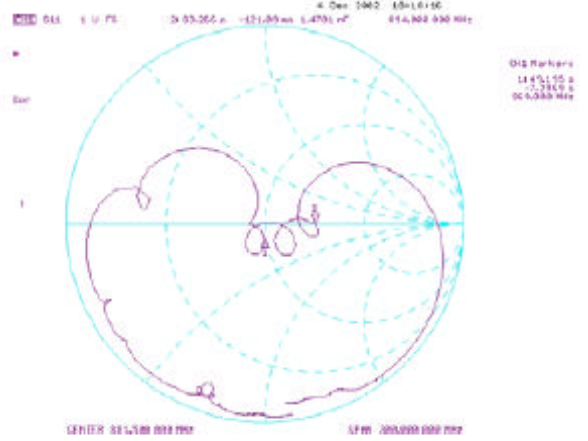
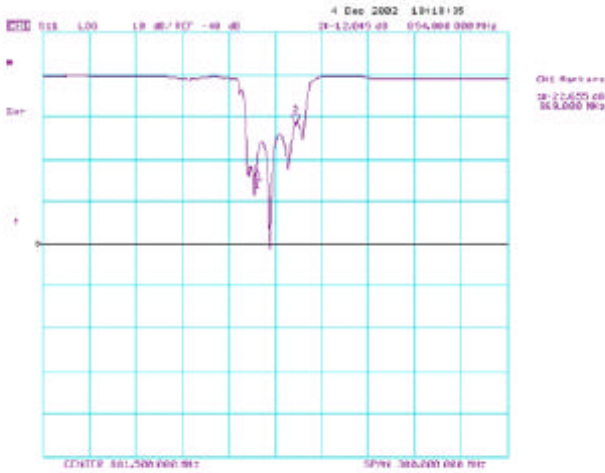
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2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
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4. Electrostatic Sensitive Device. Observe precautions for handling

F. Frequency Characteristics :

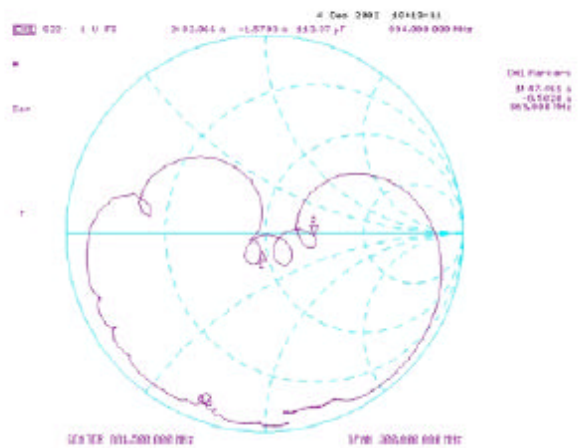
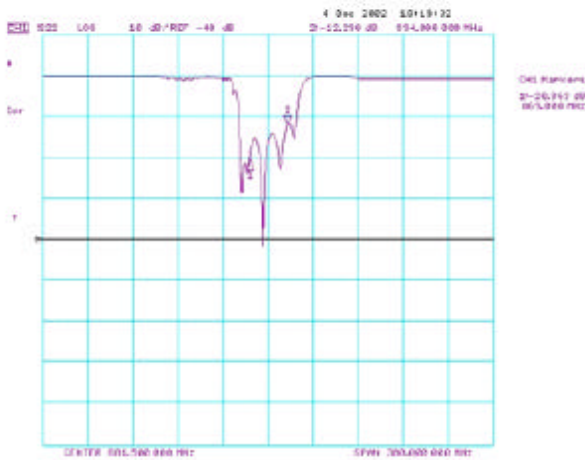
Transfer function



S11:

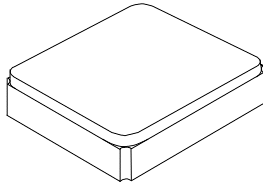


S22:



SM2520-4 Case

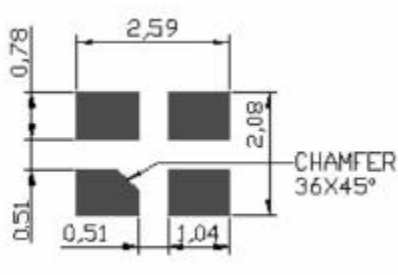
4-Terminal Ceramic Surface-Mount Case 2.5 X 2.0 mm Nominal Footprint



Case Dimensions

Dimension	mm		
	Nom		
A		2.0	
B		2.5	
C		1.0	
E		0.95	
F		0.70	
G		0.60	

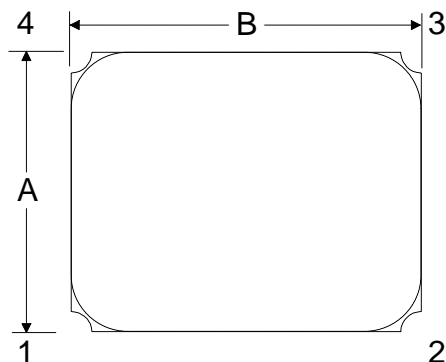
PCB Foot Print



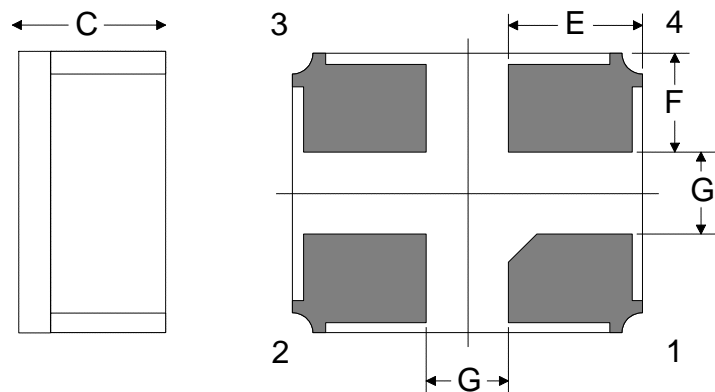
Electrical Connections

Connection		Terminals
Port 1	Single Ended Input	1
Port 2	Single Ended Output	3
	Ground	All others
Single Ended Operation Only		

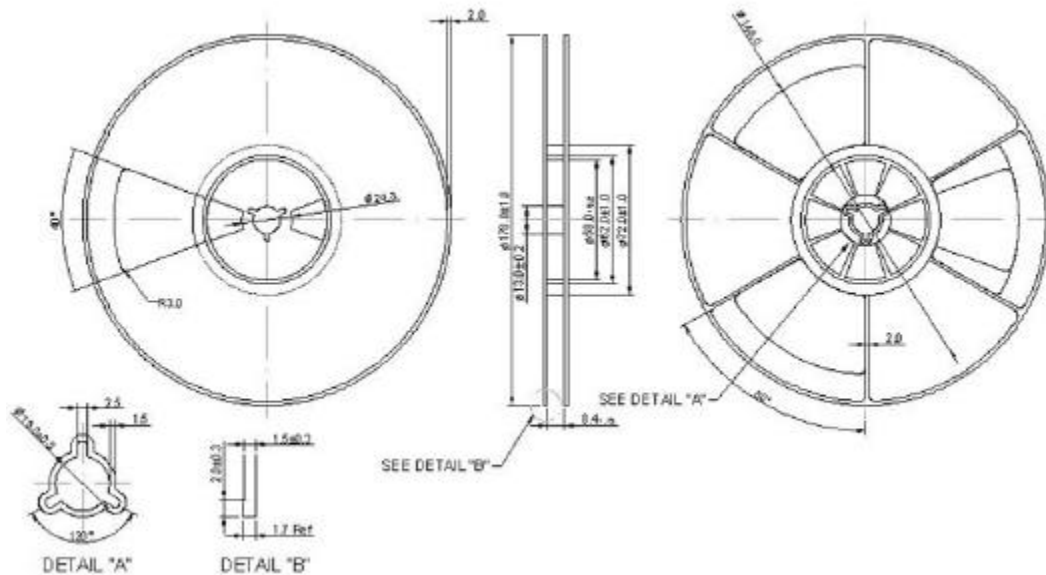
TOP VIEW



BOTTOM VIEW



Reel Dimension



Tape Dimension

