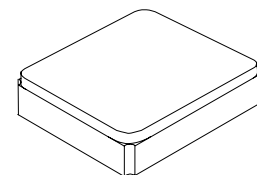




Preliminary

SF1220G

**2326.0 MHz
SAW Filter**



SM2520-5

- RF SAW Filter, 2326.0 MHz
- 1.4 x 1.1 x 0.6 mm Surface-Mount Case
- $Z_S = 50\ \text{ohm}$, $Z_L = 100\ \text{ohm}$
- Complies with Directive 2002/95/EC (RoHS)



Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power	+15	dBm
Maximum DC Voltage Between any Two Terminals	3	V
Operating Temperature Range	-40 to +88	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile	265°C for 10 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C		2326.0			MHz
Maximum Insertion Loss, 2319 to 2333 MHz	IL_{MAX}			2.6	3.2	dB
Amplitude Ripple, 2319 to 2333 MHz				0.4	1.0	dB _{P-P}
Group Delay Ripple, 2319 to 2333 MHz				7.3		ns _{P-P}
Group Delay, 2326 MHz				11		ns
VSWR, 2319 to 2333 MHz				1.85:1	2:1	
Return Loss, 2319 to 2333 MHz			6.5	9.6		dB
Source Impedance, Single Ended				50		Ω
Load Impedance, Balanced				100		Ω
Attenuation						
0.3 to 2175 MHz			39	42		dB
2175 to 2227 MHz			25	38		
2400 to 2426 MHz			15	29		
2426 to 2526 MHz			35	42		
2526 to 2700 MHz			40	44		
Case Style	SM2520-4					
Lid Symbolization	3V					

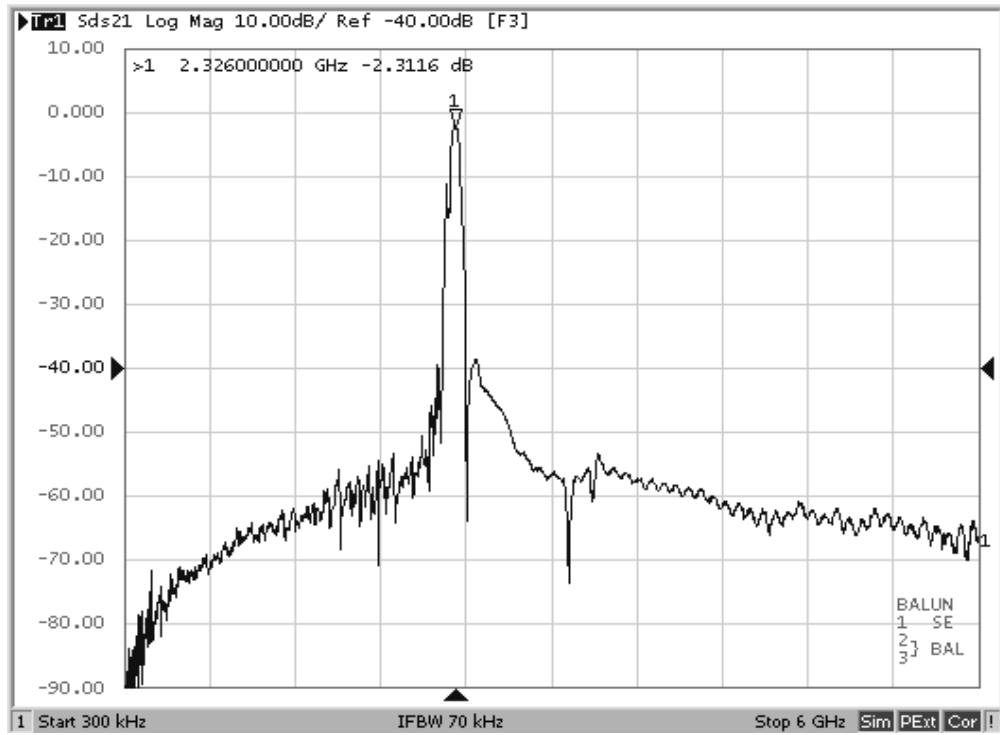


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

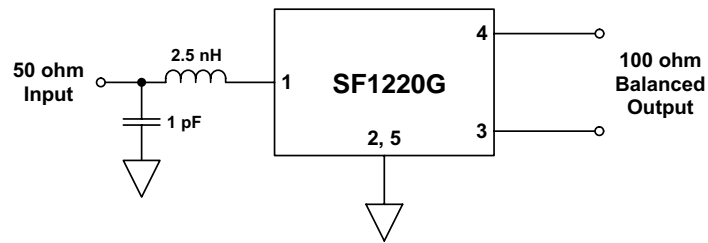
Notes:

1. US and international patents may apply.
2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

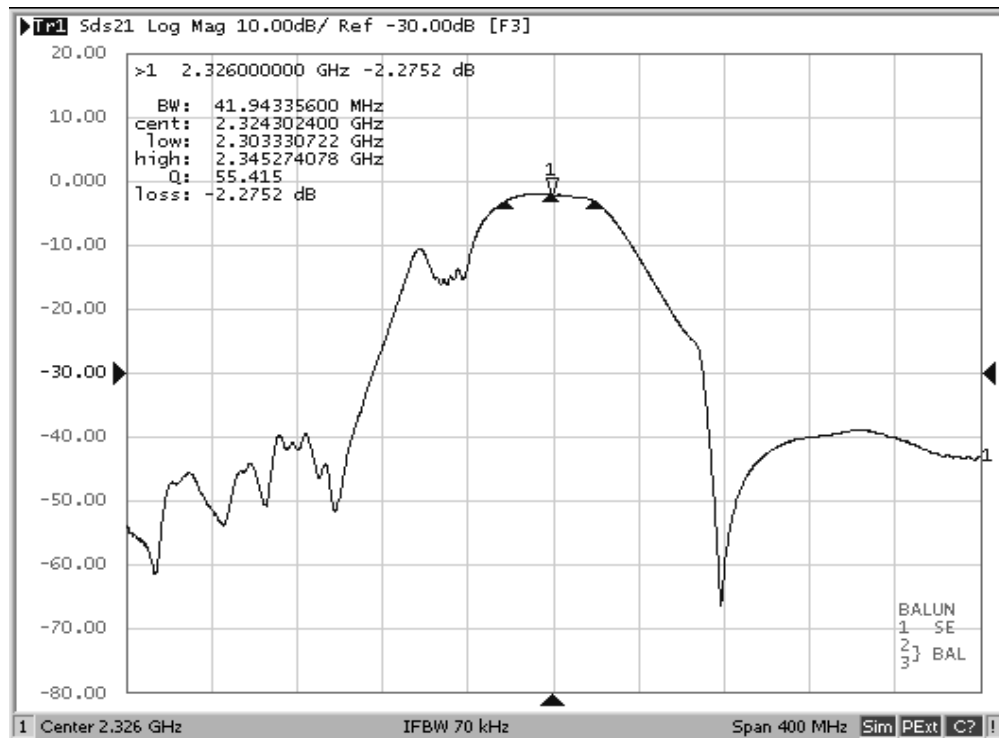
Filter Amplitude Response, 300 kHz to 6000 MHz:



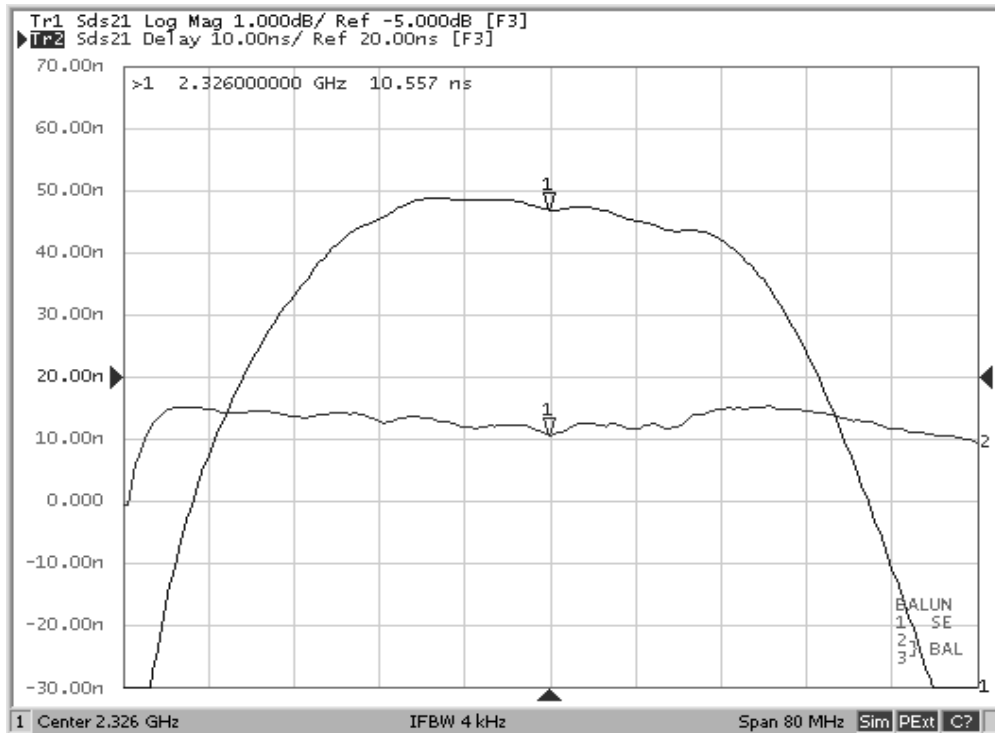
Test Configuration



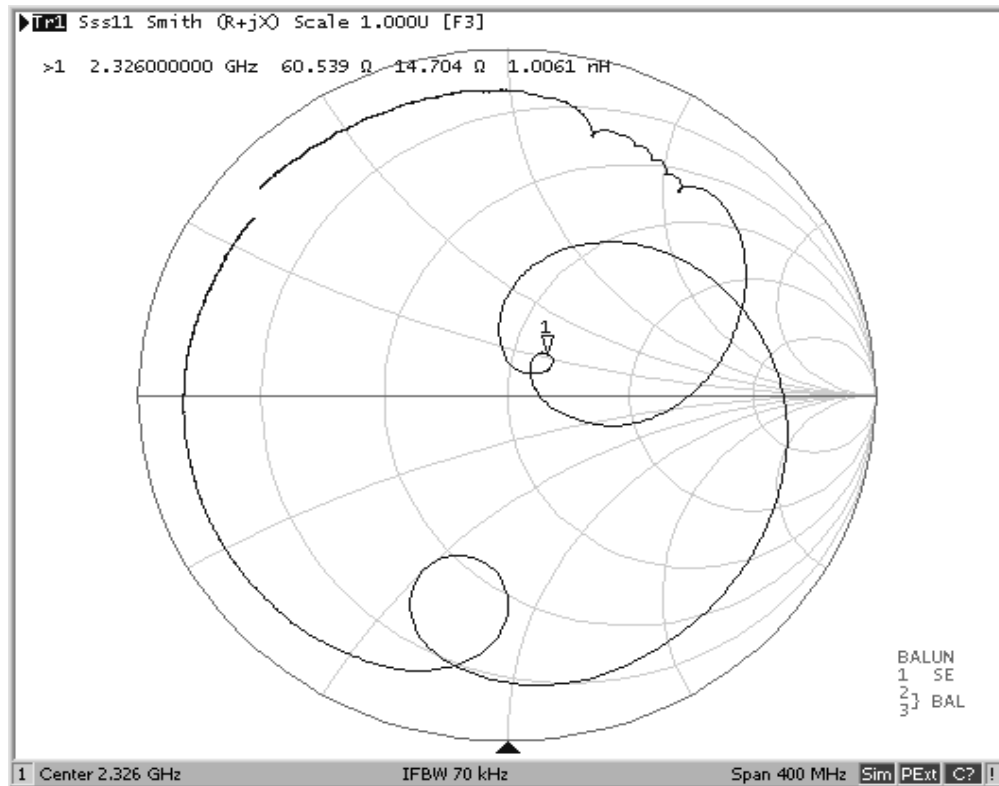
Filter Amplitude Response, 2126 to 2526 MHz:



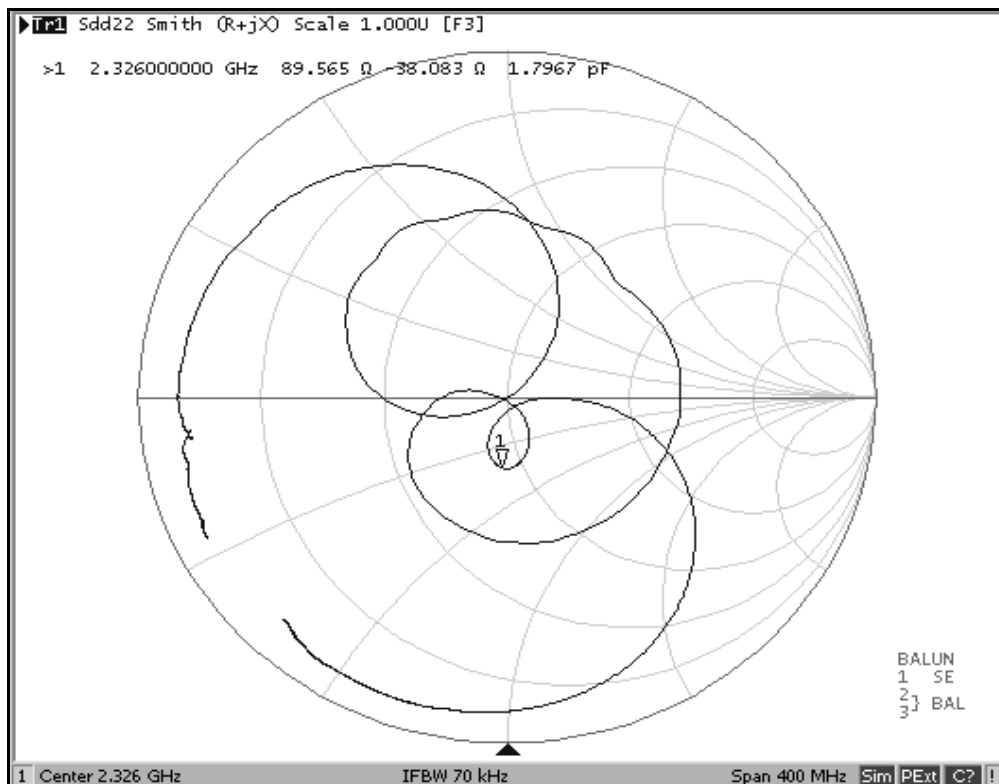
Passband Amplitude and Group Delay Response:



S₁₁ Smith Chart Plot:

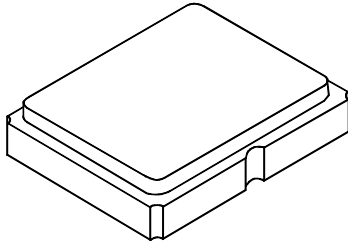


S₂₂ Smith Chart Plot:

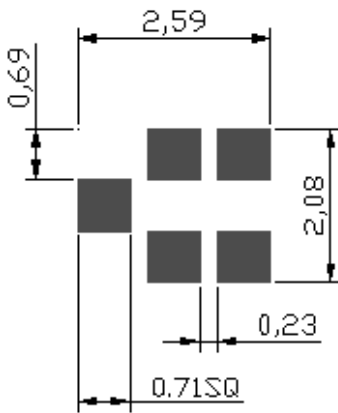


SM2520-5 Case

5-Terminal Ceramic Surface-mount Case 2.5 X 2.0 mm Nominal Footprint



PCB Footprint



Case Dimensions

Dimension	mm			Inches		
	Nom			Nom		
A	1.88	2.00	2.12	0.074	0.079	0.083
B	2.38	2.50	2.62	0.094	0.098	0.103
C	0.92	1.00	1.08	0.036	0.039	0.043
D		0.55			0.022	
E		0.55			0.022	
F		1.40			0.055	
G		0.50			0.020	
H		0.08			0.003	
I		0.90			0.035	

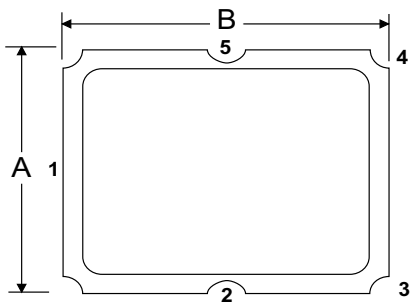
Case Material

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	

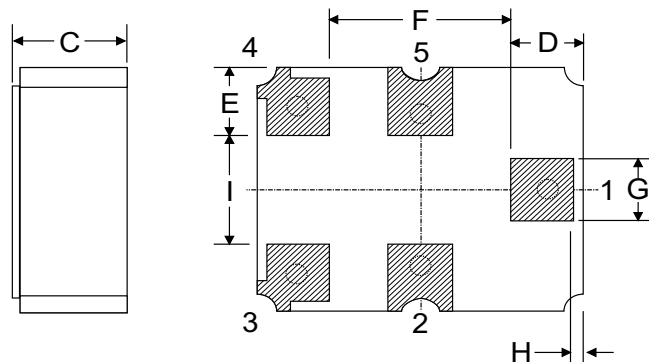
Electrical Connections

Connection	Terminals
Input	1
Output	3, 4
Ground	2, 5

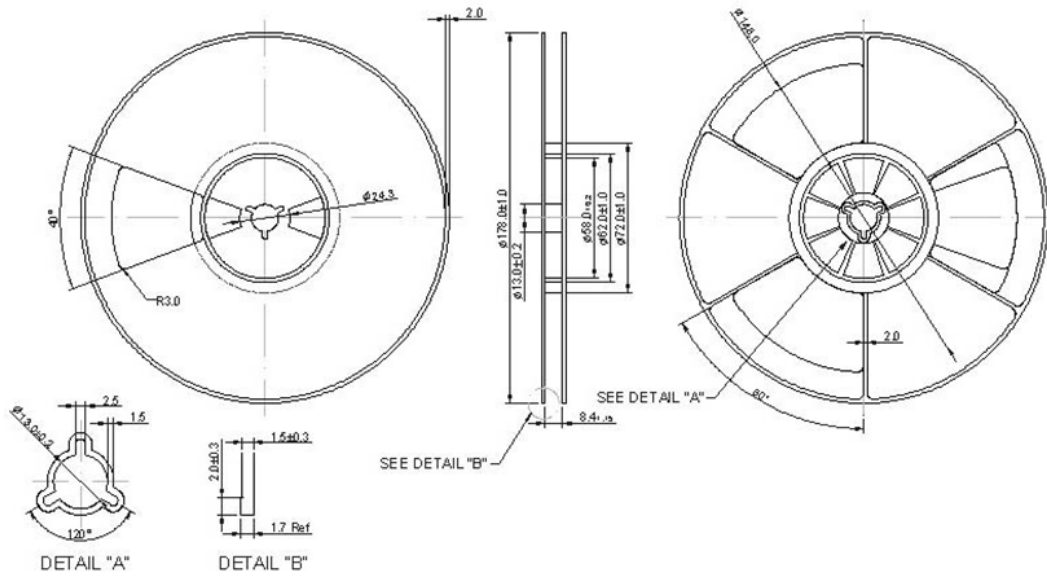
TOP VIEW



BOTTOM VIEW



Reel Dimension



Tape Dimension

