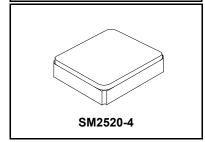




RFM products are now Murata products.

**SF1183G** 





### • 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)

### **Absolute Maximum Ratings**

Rating	Value	Units
Input Power Level	15	dB
DC Voltage Applied to any Ungrounded Terminal	±5	V
Storage Temperature Range in Tape and Reel -40 to +85		°C
Maximum Soldering Profile Temperature	265 °C for 10 s	

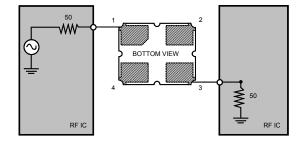
### **Electrical Characteristics**

Characteristic	Sym	Notes	Min	Тур	Max	Units
Center Frequency	f <sub>C</sub>			881.5	•	MHz
Insertion Loss, 869 to 894 MHz	IL			2.1	2.8	٩D
Amplitude Ripple, p-p, 869 to 894 MHz				0.6	1.2	dB
Return loss, 869 to 894 MHz			9.0	12.0		
Attenuation, Reference to 0 dB:						
DC to 840 MHz			45	50		
840 to 851 MHz			38	45		
914 to 924 MHz			20	26		
924 to 950 MHz			34	39		dB
950 to 997 MHz			35	48		
997 to 2200 MHz			40	48		
2200 to 3000 MHz			27	33		
Tx Band Suppression			38	45		
Source impedance	Z <sub>S</sub>			50		Ω
Load impedance	Z <sub>L</sub>			50		Ω
Operating Temperature	T <sub>Δ</sub>		-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





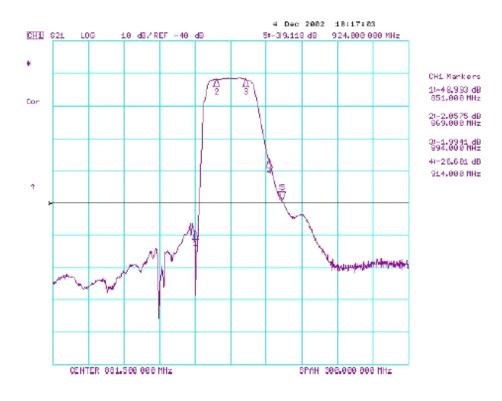
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

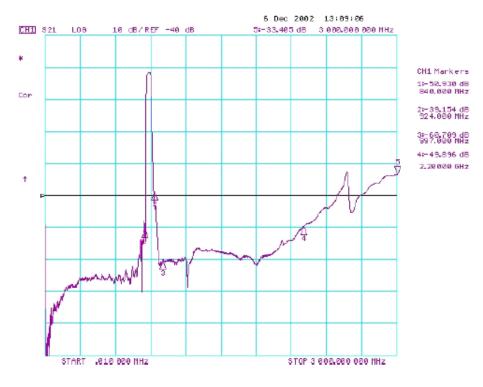
### NOTES:

- US and international patents may apply. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

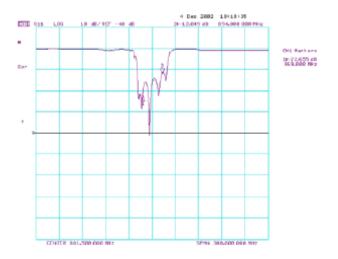
# F. Frequency Characteristics:

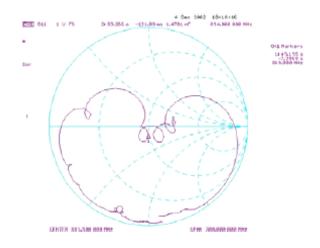
# **Transfer function**



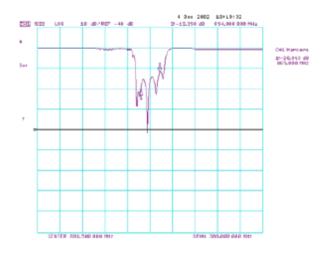


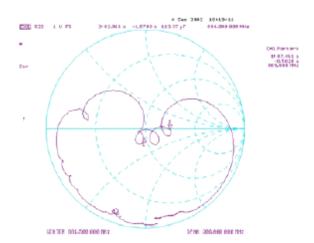
# S11:





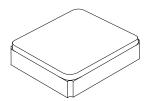
# S22:





# **SM2520-4 Case**

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



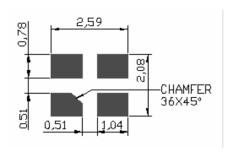
### **Case Dimensions**

Dimension	ı	mm	
Dillichsion	Nom		
Α		2.0	
В		2.5	
С		1.0	
E	(	).95	
F	(	).70	
G	(	0.60	

## **Electrical Connections**

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

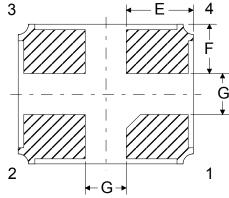
**PCB Foot Print** 



# **TOP VIEW**

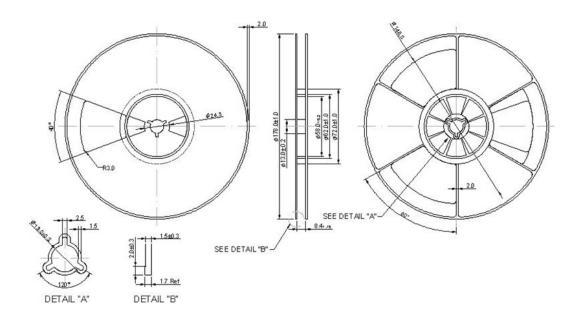
# A B 3

# - C → 3



**BOTTOM VIEW** 

# **Reel Dimension**



# **Tape Dimension**

