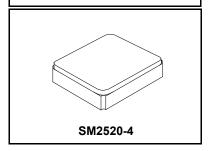




RFM products are now Murata products.

SF1186G

# 1575.42 MHz **SAW Filter**



#### Designed for Front End GPS Applications

- · Steep Rejection
- 2.5 x 2.0 x 1.0 mm Surface-Mount Case
- · No Matching Circuit Required
- AEC Q200 Qualified

#### **Absolute Maximum Ratings**

Rating	Value	Units	
Maximum Input Power, DC to 3 GHz	+10	dBm	
Maximum Input Power, 0.8 to 1 GHz and 1.7 to 1.9 GHz	+20	dBm	
Maximum DC Voltage On any Non-ground Terminal	5	VDC	
Storage Temperature Range in Tape and Reel -40 to +85			
Maximum Soldering Profile (5 cycles maximum)	265 °C for 10 s		

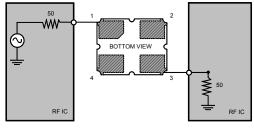
#### **Electrical Characteristics**

Characteristic	Sym	Notes	Min	Тур	Max	Units
Nominal Operating Frequency	f <sub>C</sub>		1575.42			MHz
Passband Insertion Loss, f <sub>C</sub> ±1.0 MHz	IL			1.5	2.2	dB
Amplitude Ripple, f <sub>C</sub> ±1.0 MHz				0.1	1.0	dB <sub>P-P</sub>
Attenuation Referenced to 0 dB:						
DC to 1400 MHz			35.0	37.0		
1400 to 1475 MHz			30.0	34.0		
1475 to 1525 MHz			25.0	37.0		dB
1625 to 1640 MHz			30.0	45.0		
1640 to 2000 MHz			32.0	34.0		
2000 to 3000 MHz			20.0	28.0		
S <sub>11</sub> VSWR across f <sub>C</sub> ±1.0 MHz				1.2	2.0	
S <sub>22</sub> VSWR across f <sub>C</sub> ±1.0 MHz				1.2	2.0	
Source impedance	Z <sub>S</sub>			50		Ω
Load impedance	Z <sub>L</sub>			50		Ω
Operating Temperature	T <sub>A</sub>		-40		+85	°C

Single-ended Input / Output Impedance Match	No matching network required for operation at 50 ohms			
Case Style	SM2520-4			
Lid Symbolization (2A=SF1186G Y=year, W=week)	2A, YW			
Standard Reel Quality, 7 inch Reel Size	500 Pieces Reel			
Standard Reel Quantity, 13 inch Reel Size	3000 Pieces/Reel			

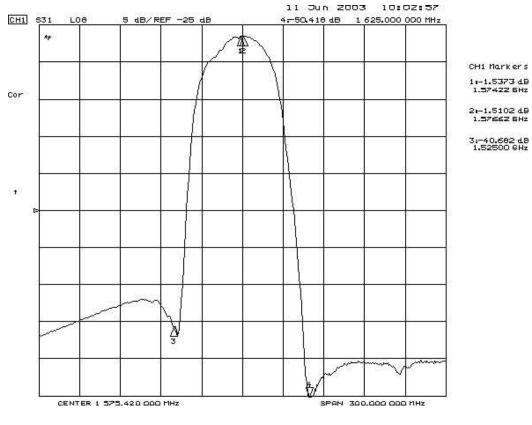
#### **Electrical Connections**

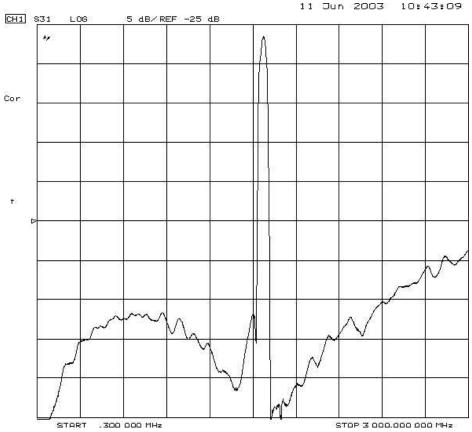
Connection	Terminals			
Input	1			
Output	3			
Ground	All others			

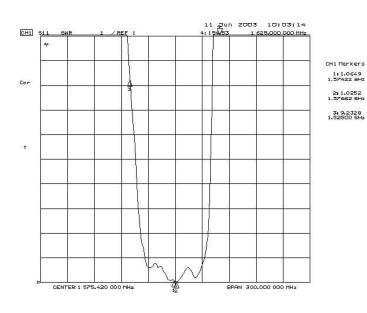


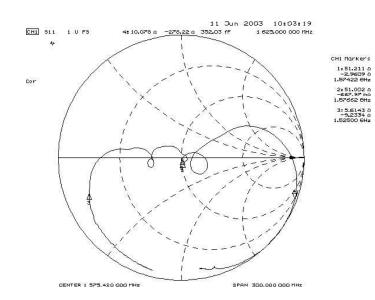
# CAUTION: Electrostatic Sensitive Device. Observe precautions for handling. NOTES: NOTES:

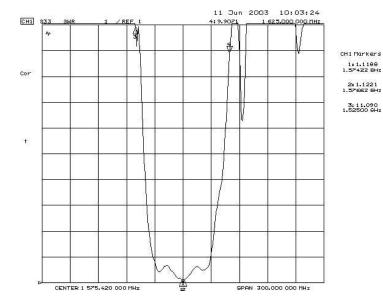
- US and international patents may apply. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd This product is made by TAI-SAW Technology Co., LTD. in Taiwan.

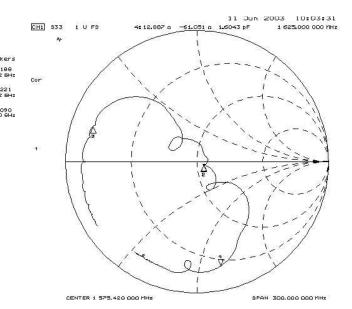












CH1 Markers

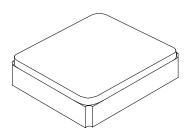
1:55.340 a -2.5137 a 1.57422 OHz

2:55.604 n -2.3867 n 1.57662 OHz

3: 4.6333 Ω 8.2705 Ω 1.52500 GHz

# **SM2520-4 Case**

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



#### **Case Dimensions**

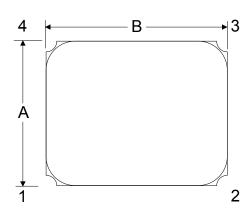
Dimension	mm				
	Min	Nom	Max		
Α	1.88	2.0	2.12		
В	2.38	2.5	2.62		
С			1.00		
D	0.67	0.80	0.83		
E	0.80	0.95	1.10		
F	0.55	0.70	0.85		
G	0.50	0.60	0.70		

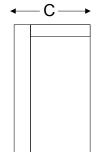
#### **Electrical Connections**

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

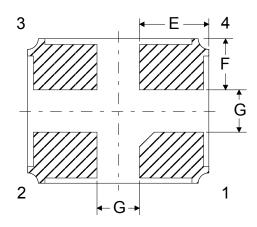
Materials					
Solder Pad Plating	0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel				
Lid Plating	2.0 to 3.0 µm Nickel				
Body	Al <sub>2</sub> O <sub>3</sub> Ceramic				
Pb Free					

## **TOP VIEW**

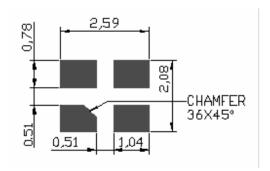




## **BOTTOM VIEW**



#### **PCB Foot Print**



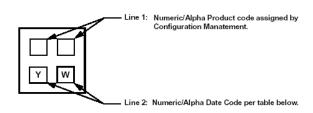
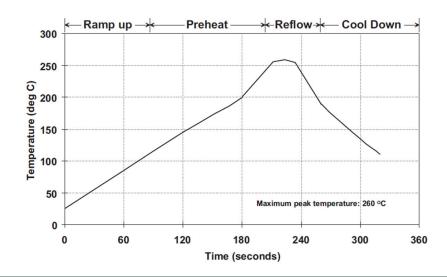


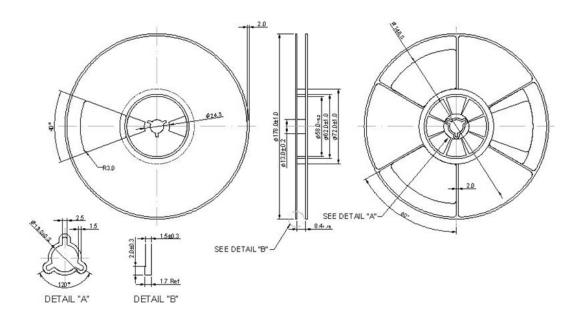
Table 4: SM2520-4

YEAR	CODE	WEEK CODE					per .		
		ALPHA	REPRESENTS	ALPHA	REPRESENTS	ALPHA	REPRESENTS	ALPHA	REPRESENTS
NUMBER	REPRESENTS	CHARACTER	WEEK NO.						
3	2013	Α	01	N	14	а	27	n	40
4	2014	В	02	0	15	b	28	0	41
5	2015	С	03	Р	16	С	29	р	42
6	2016	D	04	Q	17	d	30	q	43
7	2017	Е	05	R	18	е	31	r	44
8	2018	F	06	S	19	f	32	s	45
9	2019	G	07	T	20	g	33	t	46
0	2020	Н	08	U	21	h	34	u	47
		T	09	٧	22	i	35	V	48
		J	10	W	23	j	36	w	49
		K	11	X	24	k	37	Х	50
		L	12	Y	25	ı	38	у	51
		M	13	Z	26	m	39	Z	52

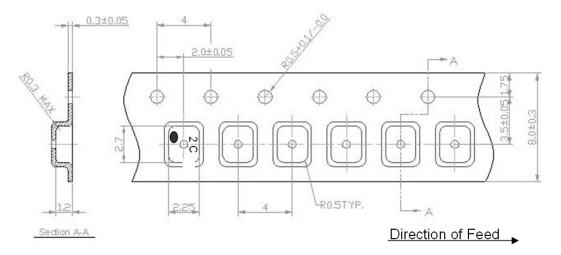
#### **Reflow Profile**



## **Reel Dimension**



## **Tape Dimension**



## 单击下面可查看定价,库存,交付和生命周期等信息

>>Murata(村田)