# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## RFM products are now Murata products.

**SF2164E** 

1484.3 MHz

#### • SAW Filter for Digital Television

Complies with Directive 2002/95/EC (RoHS)



Differential Source and Load Configuration

Terminating Source/Load Impedance :  $Z_S = 150 \Omega$ 

#### **Maximum Rating**

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-50 to +95	°C
Suitable for Lead-free Soldering - Maximum Soldering Profile	260 °C for 30 s	



#### **Electrical Characteristics**

Characteristic	Sym	Notes	Min	Тур	Max	Units	
Center Frequency	f <sub>C</sub>			1484.3		MHz	
Insertion Loss, 1464.3 to 1504.3 MHz	IL			2.0	4.5	dB	
Amplitude Ripple, 1464.3 to 1504.3 MHz		1		0.6	2.0	dB	
Phase Error, 1464.3 to 1504.3 MHz		1		3.2	6.0	deg	
Input/Output VSWR, 1464.3 to 1504.3 MHz				2:1	2.5:1		
2 dB Bandwidth			40	60		MHz	
Attenuation Referenced to 0 dB:							
50 to 1402.3 MHz			48	60			
1566.3 to 1810.5 MHz			50	60		dB	
1810.5 to 4250 MHz			55	65		- ub	
4250 to 6000 MHz			30	38		1	
Case Style		SM3030-8 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	860, YWWS						
Standard Reel Quantity Reel Size 7 Inch	500 Pieces/Reel						
Reel Size 13 Inch	3000 Pieces/Reel						

#### **Electrical Connections**

	Connection	Terminals		
Port 1	Balanced Input	1,2		
Port 2	Balanced Output	5,6		
	Ground	All Others		
Dat Indiantas Din 1				

Dot Indicates Pin 1

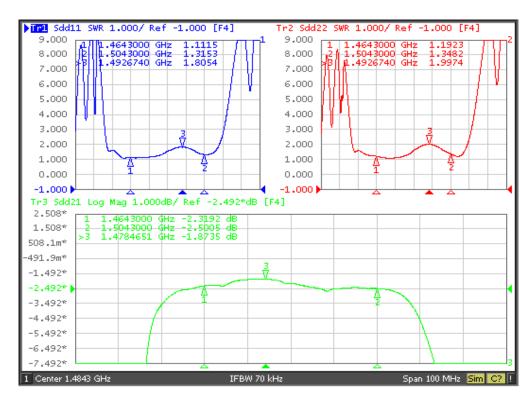


NOTES:

1.

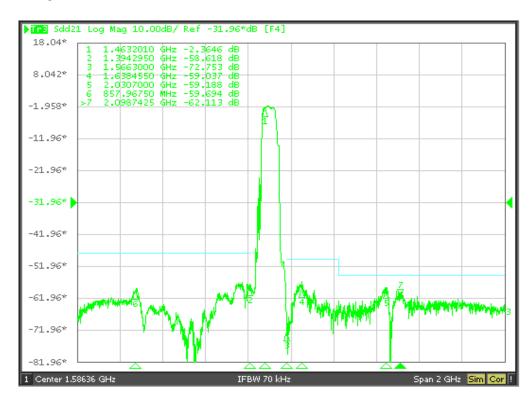
2.

Specification applies to any 30 MHz segment within the passband. US and international patents may apply. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd. 3.

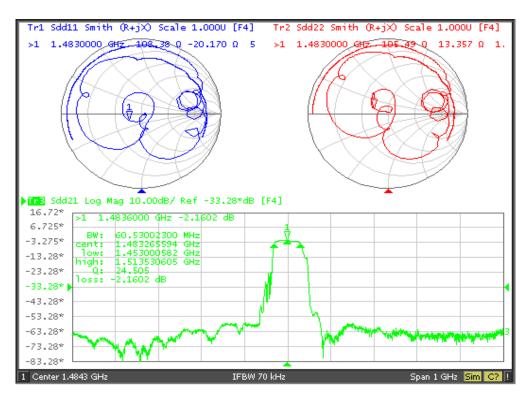


## **Passband Amplitude and SWR Response**

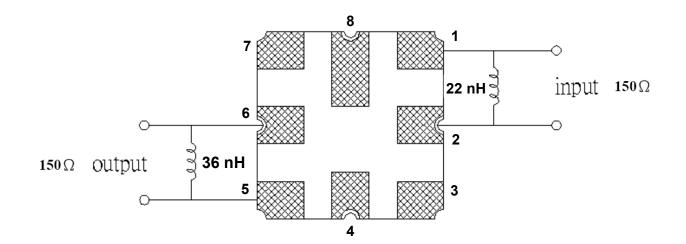
## **Broadband Response**



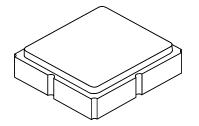
## $S_{11},\,S_{22}$ and $S_{21}$ Plots

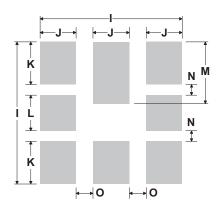


Test Circuit, Bottom View



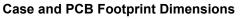
## 8-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint





PCB Footprint Top View

**TOP VIEW** 

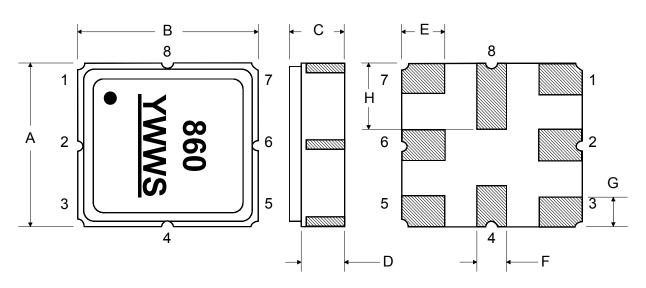


Dimension		mm			Inches		
Billension	Min	Nom	Max	Min	Nom	Мах	
Α	2.87	3.0	3.13	0.113	0.118	0.123	
В	2.87	3.0	3.13	0.113	0.118	0.123	
С	1.14	1.27	1.40	0.045	0.050	0.055	
D	0.79	0.92	1.05	0.031	0.036	0.041	
E	0.62	0.75	0.88	0.024	0.029	0.034	
F	0.47	0.60	0.73	0.018	0.024	0.029	
G	0.47	0.60	0.73	0.018	0.024	0.029	
н	1.07	1.20	1.33	0.042	0.047	0.052	
I		3.19			0.126		
J		0.81			0.032		
К		0.96			0.038		
L		0.81			0.032		
м		1.39			0.055		
N		0.23			0.009		
0		0.38			0.015		

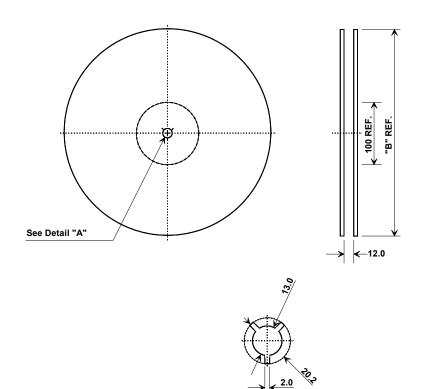
### **Case Materials**

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

**BOTTOM VIEW** 



### **Tape and Reel Specifications**



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

## **COMPONENT ORIENTATION and DIMENSIONS**

Carrier Tape Dimensions				
Ao	3.35 mm			
Во	3.35 mm			
Ко	1.4 mm			
Pitch	8.0 mm			
W	12.0 mm			

