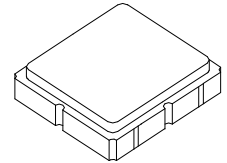


**SF2017D**

**1220 MHz  
SAW Filter**



**SM3838-8**

• **SAW Filter for Digital Television**

**Characteristics :**

Balance-to-Balanced operation

Terminating source impedance :  $Z_S = 200 \Omega$

Terminating load impedance :  $Z_L = 200 \Omega$

**Maximum Rating**

Rating	Value	Units
Operating Temperature	-40 to +85	°C
Storage Temperature	-40 to +85	°C

**Electrical Characteristics**

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_C$			1220		MHz
Insertion Loss, 1216 to 1224 MHz	IL			3.2	5.3	dB
Ripple, 1216 to 1224 MHz				0.6	2.5	dB
Attenuation Reference level from 0 dB:						
1) 500.. $f_C$ -91 MHz			50	60		dB
2) $f_C$ -91 to $f_C$ -85 MHz			46	53		
3) $f_C$ -76 to $f_C$ -68 MHz			46	53		
5) $f_C$ -88 MHz			50	55		
6) $f_C$ -72 MHz			48	65		
7) $f_C$ -44 MHz			50	54		
8) $f_C$ -36 MHz			46	62		
9) $f_C$ +70 to 2000 MHz			50	61		
Group delay ripple, 1216 to 1224 MHz				11		

Case Style	SM3838-8 3.8 x 3.8 mm Nominal Footprint					
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	456, YWWS					
Standard Reel Quantity	Reel Size 7 Inch	1000 Pieces/Reel				
	Reel Size 13 Inch	3000 Pieces/Reel				

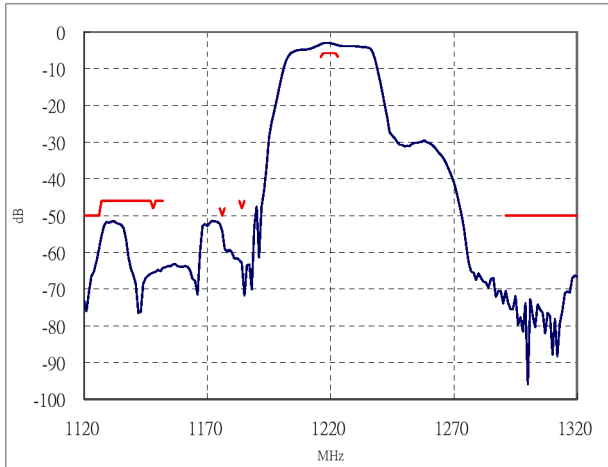


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

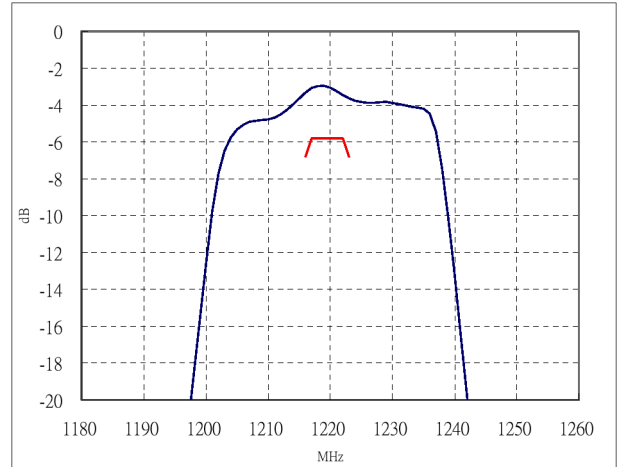
**NOTES:**

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

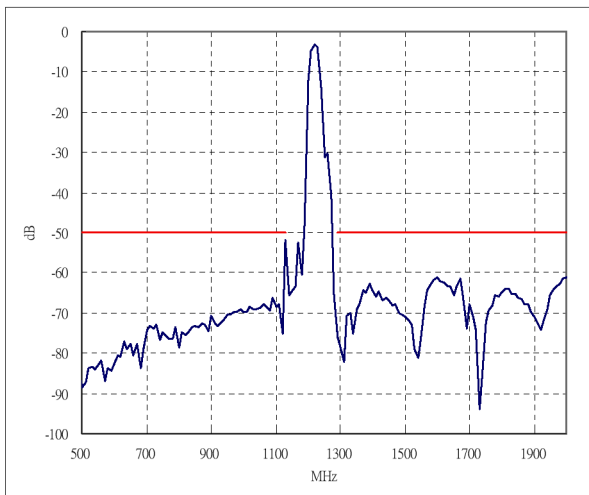
**Frequency Characteristics**  
**1. Sdd21 Response**



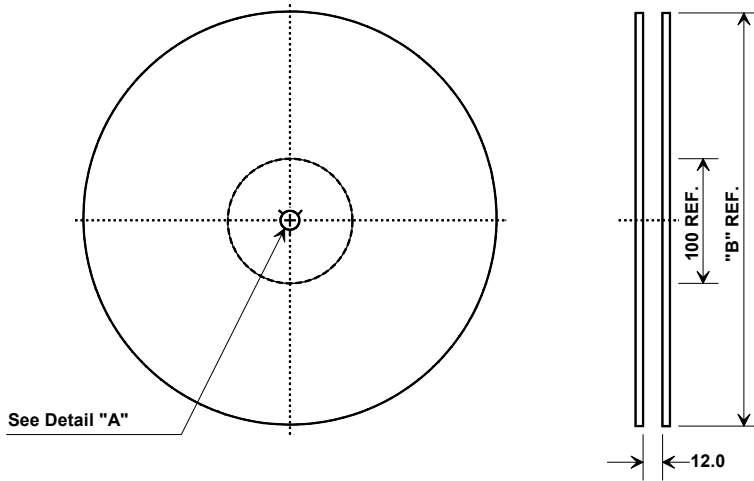
**2. Sdd21 Response (Inband)**



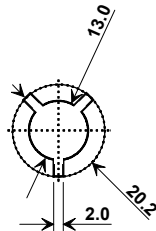
**3. Sdd21 Response (wideband)**



## Tape and Reel Specifications

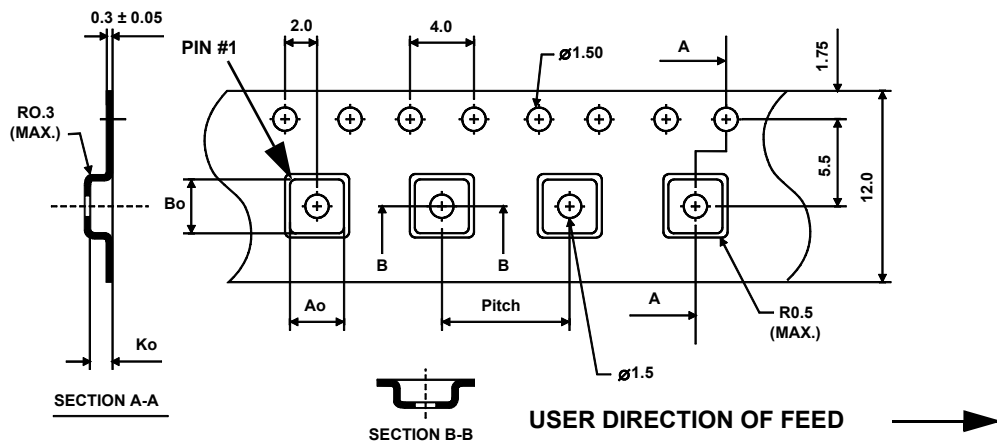


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000



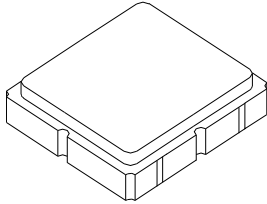
### COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm



# SM3838-8 Case

## 8-Terminal Ceramic Surface-Mount Case 3.8 X 3.8 mm Nominal Footprint



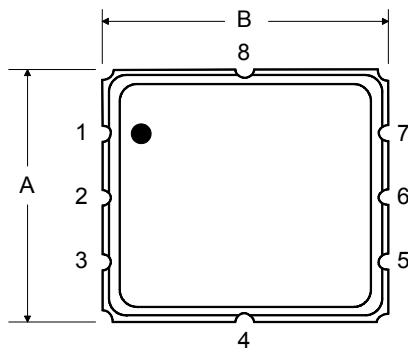
### Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	3.6	3.8	4.0		0.15	
B	3.6	3.8	4.0		0.15	
C			1.4		0.06	
D		1.0			0.04	
E		1.0			0.04	
F		0.6			0.02	
G	2.39	2.54	2.69		0.100	
H		1.5			0.06	

### Electrical Connections

Connection	Terminals
Balance Input	1, 2
Balance Output	5, 6
Case Ground	3, 4, 7, 8

TOP VIEW



BOTTOM VIEW

