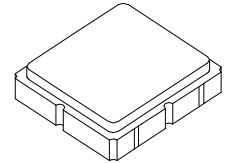




**SF2017D**

**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 ~ +85	°C
Storage Temperature	-40 ~ +85	°C

**Electrical Characteristics**

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

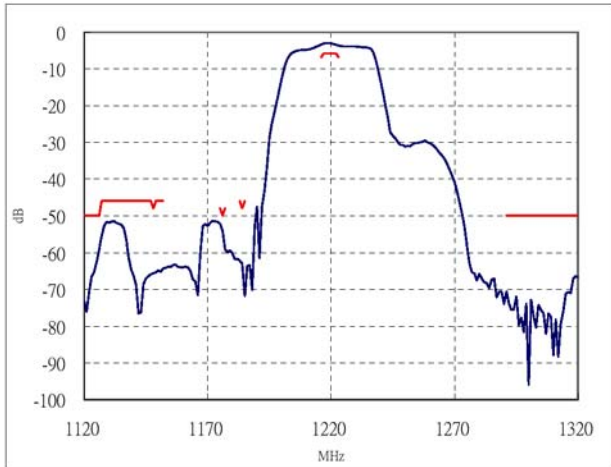


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

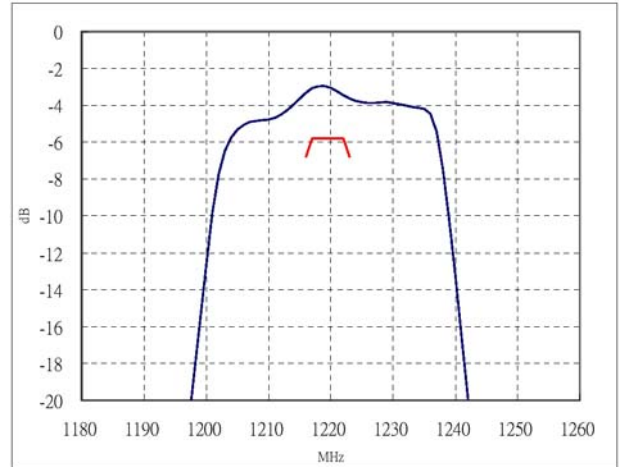
**Notes:**

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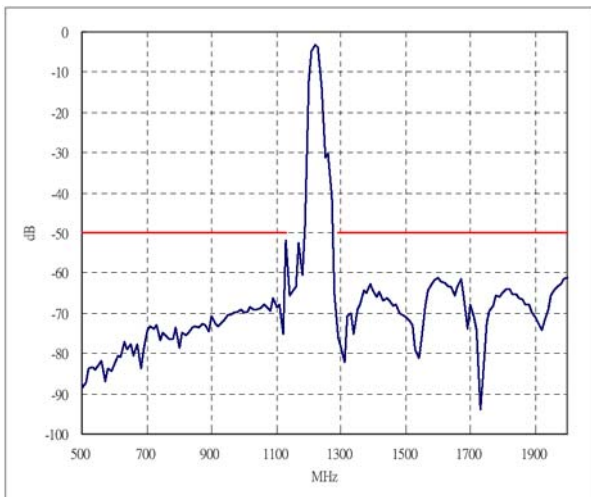
**Frequency Characteristics**  
**1. Sdd21 Response**



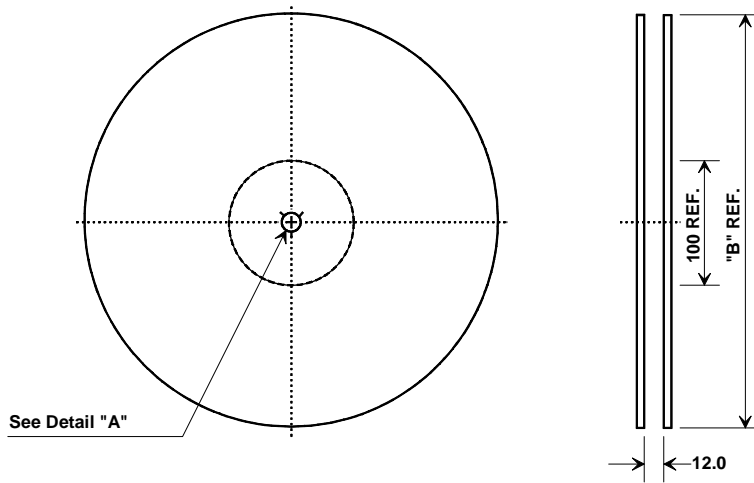
**2. Sdd21 Response (Inband)**



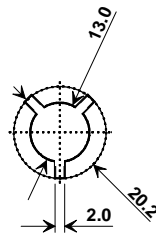
**3. Sdd21 Response (wideband)**



## Tape and Reel Specifications

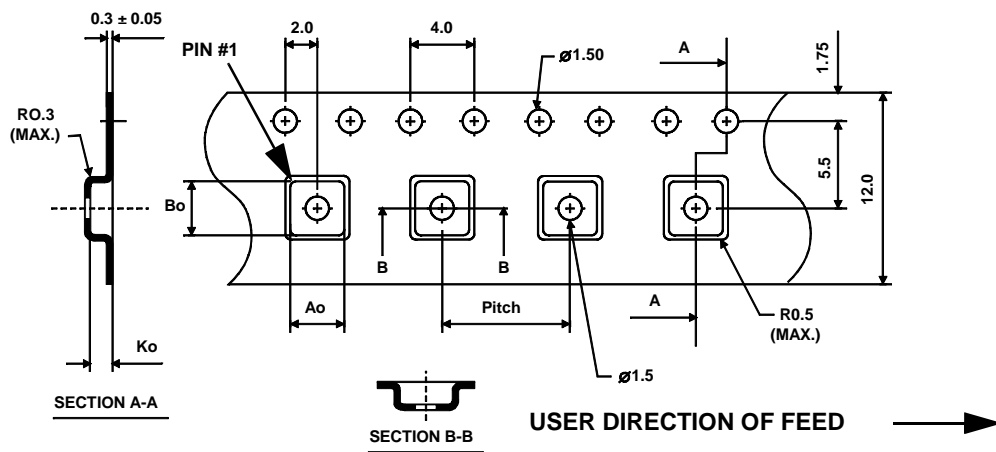


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	1000
13	330	3000



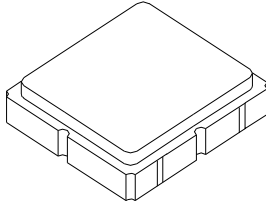
### COMPONENT ORIENTATION and DIMENSIONS

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



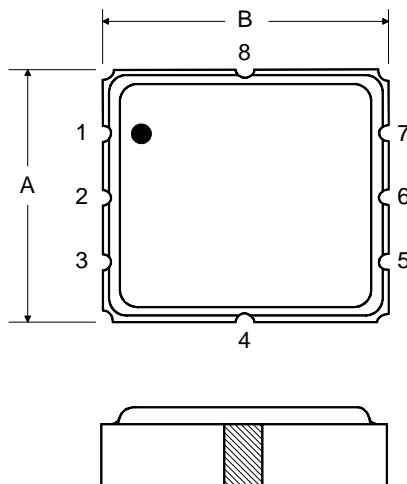
### Case Dimensions

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

