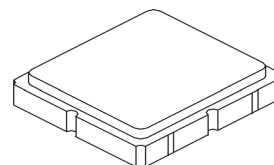


SF2017D

**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		nSp,p

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				



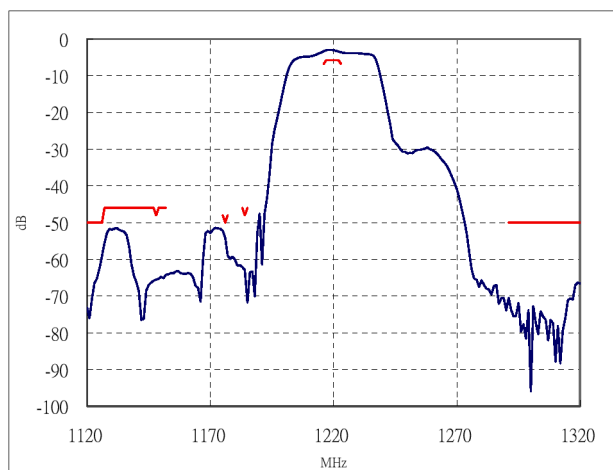
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

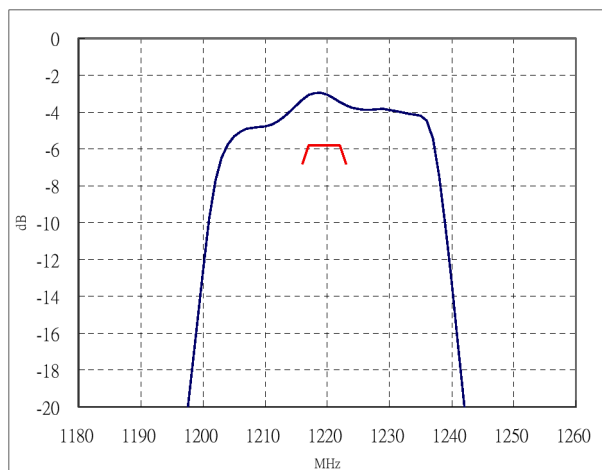
1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Frequency Characteristics

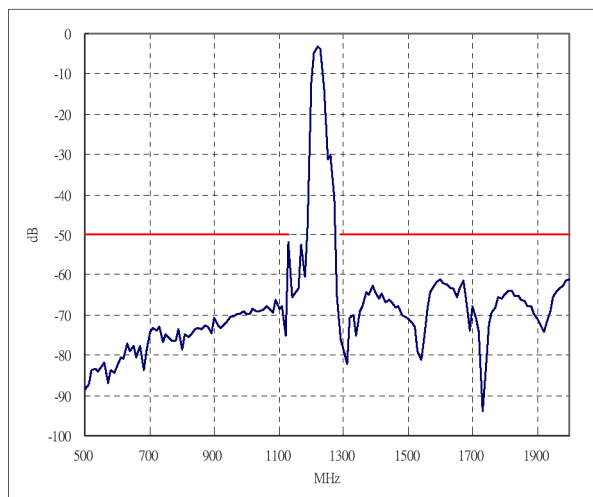
1. Sdd21 Response



2. Sdd21 Response (Inband)



3. Sdd21 Response (wideband)



Technical drawing of a circular component, likely a flange or end plate, showing three views: a top view, a side view, and a detail view.

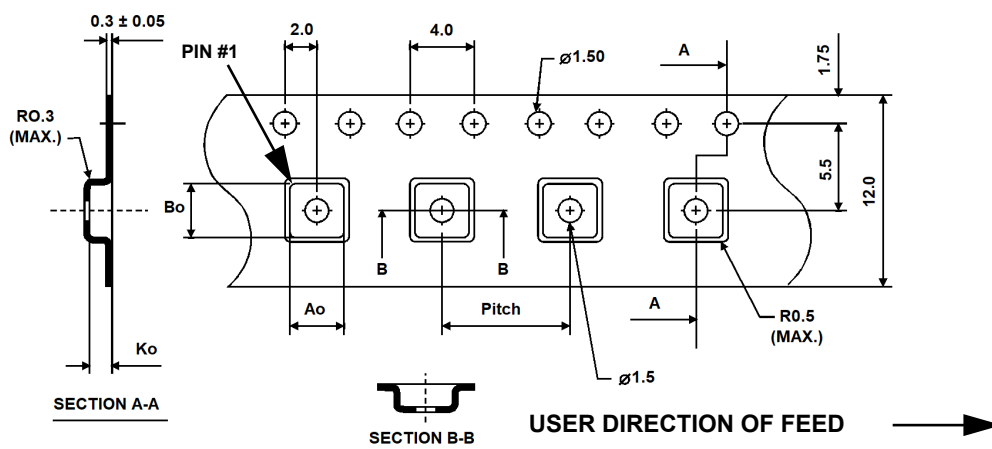
Top View: A large circle with a smaller concentric circle in the center. A horizontal dashed line and a vertical dashed line intersect at the center. A leader line points from the text "See Detail 'A'" to the center of the inner circle.

Side View: A vertical cross-section showing the thickness of the component. The total thickness is dimensioned as 12.0. The inner hole has a diameter of 100 REF. The outer diameter is dimensioned as "B" REF.

Detail View (Detail A): A cross-section of the central hole. It shows a circular hole with a diameter of 13.0. The hole is surrounded by a flange with a thickness of 2.0. The outer diameter of the flange is dimensioned as 20.2.

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

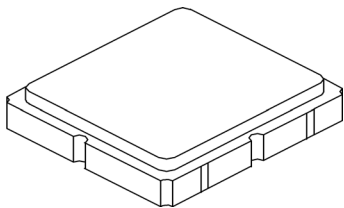
Carrier Tape Dimensions	
Ao	4.25 mm
Bo	4.25 mm
Ko	1.30 mm
Pitch	8.0 mm
W	12.0 mm



SM3838-8 Case

8-Terminal Ceramic Surface-Mount Case

3.8 X 3.8 mm Nominal Footprint



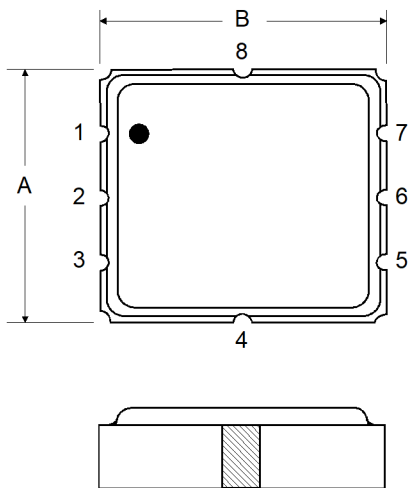
Case Dimensions

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

