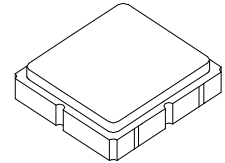




SF2017D

**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 | |



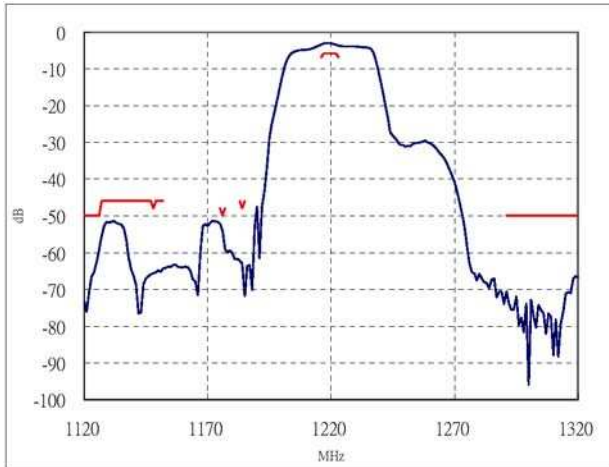
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

Notes:

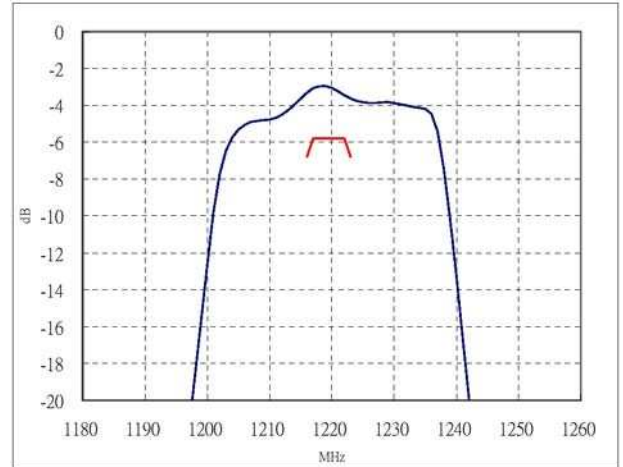
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Frequency Characteristics

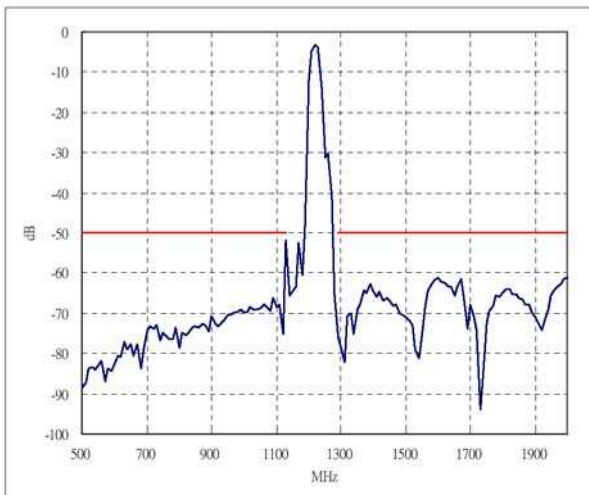
1. Sdd21 Response



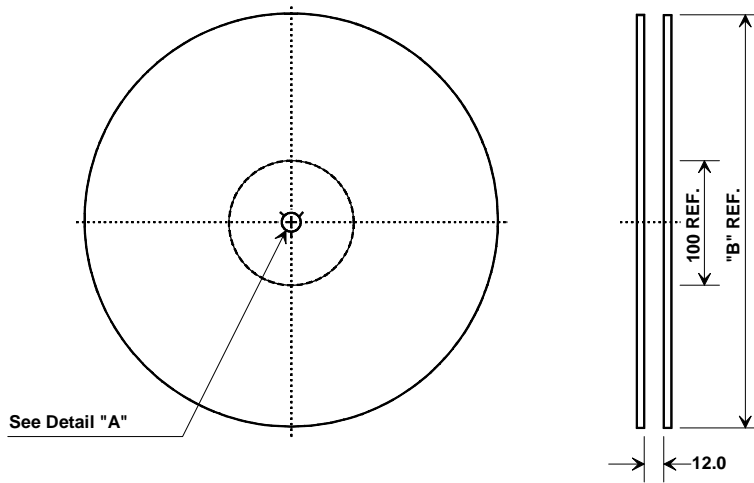
2. Sdd21 Response (Inband)



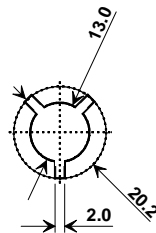
3. Sdd21 Response (wideband)



Tape and Reel Specifications

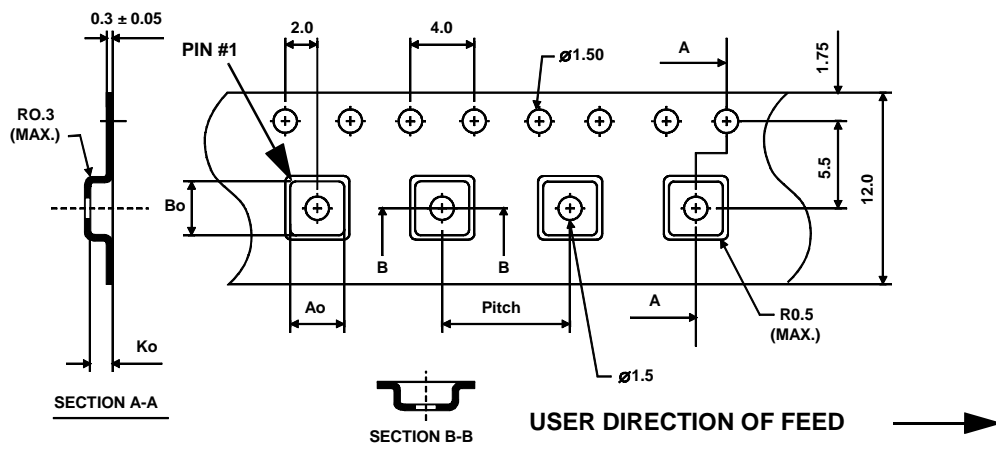


| "B" Nominal Size | | Quantity Per Reel |
|------------------|-------------|-------------------|
| Inches | millimeters | |
| 7 | 178 | 1000 |
| 13 | 330 | 3000 |



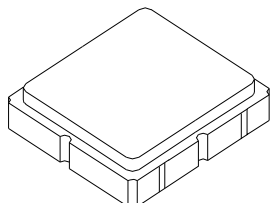
COMPONENT ORIENTATION and DIMENSIONS

| 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



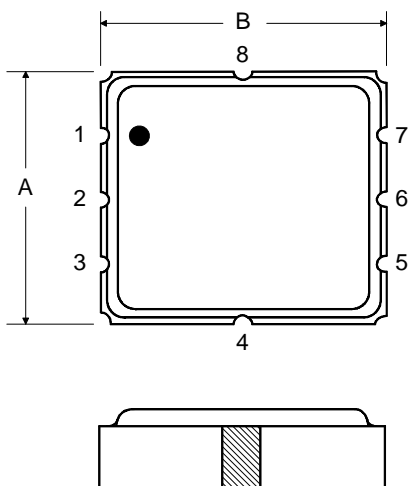
Case Dimensions

| 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

