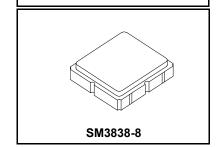


AEC-Q200

This component was always RoHS compliant from the first date of manufacture.

- **SF2188D**
- 340 MHz **SAW Filter**



No External Matching Required

- 3.8 x 3.8 x 1.4 mm Surface-mount Package
- Complies with Directive 2002/95/EC (RoHS)

Absolute Maximum Ratings

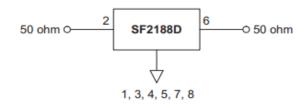
| Rating | Value | Units |
|--|----------------|-------|
| Maximum Incident Power in Passband | +10 | dBm |
| Maximum DC Voltage between any Two Terminals | 3 | VDC |
| Storage Temperature Range | -40 to +85 | °C |
| Suitable for Lead-free Soldering - Maximum Soldering Profile | 260°C for 30 s | |

Electrical Characteristics

| Characteristic | Sym | Notes | Min | Тур | Max | Units |
|--|----------------|---|-----|-----|-----|-------------------|
| Nominal Center Frequency | F _C | 1 | 339 | 340 | 341 | MHz |
| Insertion Loss | IL | 1 | | 2.0 | 3.0 | dB |
| 1 dB Bandwidth | | 1 | | 8 | 11 | MHz |
| Passband Ripple, 336 to 344 MHz | | 1 | | 0.4 | 1.0 | dB _{P-P} |
| Absolute Attenuation (referenced from 0 dB) | | | | | | |
| 10 to 300 MHz | | 2 | 50 | 54 | | dB |
| 300 to 320 MHz | | 2 | 40 | 47 | | dB |
| 375 to 800 MHz | | 2 | 40 | 45 | | dB |
| Frequency Temperature Coefficient | | | | -36 | | ppm/°C |
| Source Impedance | | | | 50 | | ohm |
| Load Impedance | | | | 50 | | ohm |
| Operating Temperature Range | | | -40 | | +85 | °C |
| Case Style | | SM3838-8 3.8 x 3.8 mm Nominal Footprint | | | | |
| Lid Symbolization (Y=year, WW=week, S=shift) | | 876, <u>YWWS</u> | | | | |

Electrical Connections

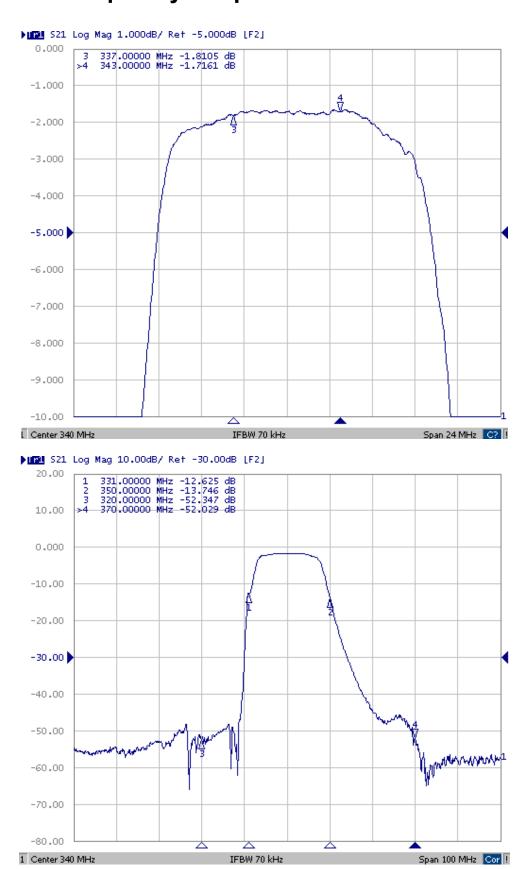
| Connection | Terminals | | |
|-------------|------------|--|--|
| Port 1 | 2 | | |
| Port 2 | 6 | | |
| Case Ground | All others | | |



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

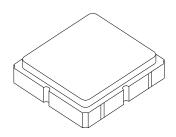
- 1. The design, manufacturing process, and specifications of this device are subject to change.
- 2. US or International patents may apply.

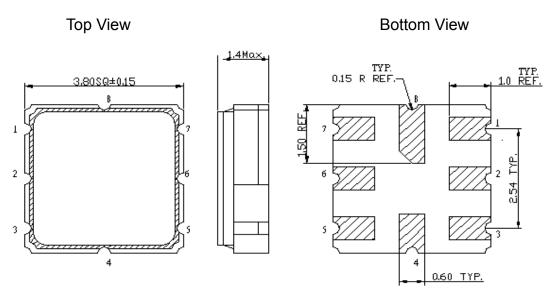
SF2188D Frequency Response



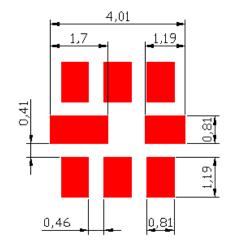
SM3838-8 Case

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



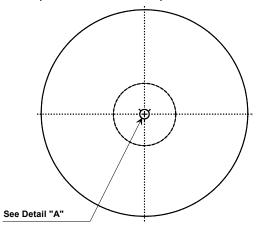


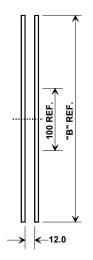
PCB Footprint



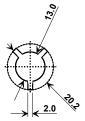
Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481



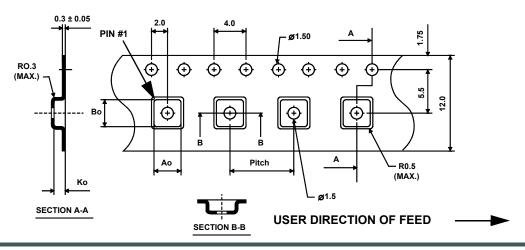


| "B " Nominal Size | | Quantity Per Reel | |
|----------------------|-------------|-------------------|--|
| Inches | millimeters | | |
| 7 | 178 | 1000 | |
| 13 | 330 | 3000 | |



COMPONENT ORIENTATION and DIMENSIONS

| Carrier Tape Dimensions | | | |
|-------------------------|---------|--|--|
| Ao | 4.25 mm | | |
| Во | 4.25 mm | | |
| Ko | 1.30 mm | | |
| Pitch | 8.0 mm | | |
| W | 12.0 mm | | |



Recommended Reflow Profile

- 1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
- 2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
- 3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
- 4. Time: 5 times maximum.

