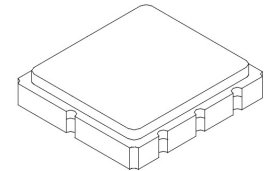


SF2432D

**475 MHz
SAW Filter**



SM3838-8

- **High Performance SAW Filter**
- **3.8 x 3.8 mm Surface-mount Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

Absolute Maximum Ratings

| Rating | Value | Units |
|---|-------------------|-------|
| Maximum Incident Power in Passband | +10 | dBm |
| Maximum DC Voltage Between any Two Active Terminals | 3 | VDC |
| Operable Temperature Range | -45 to +125 | °C |
| Specification Temperature Range | -40 to +85 | °C |
| Storage Temperature Range | -40 to +95 | °C |
| Maximum Soldering Profile: 5 Cycles | 260 °C for 10 sec | |

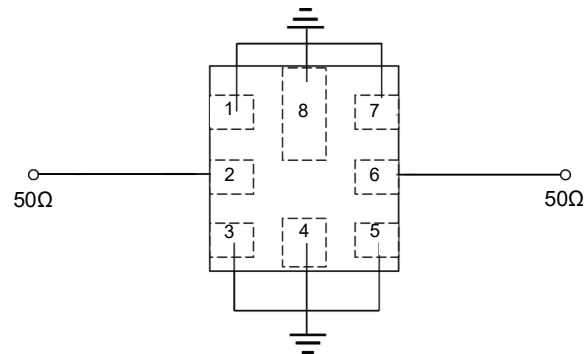
Electrical Characteristics

| Characteristic | Sym | Notes | Min | Typ | Max | Units |
|--|-------|-------|-----|-----|-----|-------|
| Center Frequency | f_c | | | 475 | | MHz |
| Insertion Loss (470 to 480 MHz) | | | | 1.8 | 3.2 | dB |
| Amplitude Ripple (470 to 480 MHz) | | | | 0.4 | 1.5 | |
| Attenuation (Reference level from 0dB) | | | | | | dB |
| 0 to 375 MHz | | | 50 | 55 | | |
| 375 to 430 MHz | | | 38 | 52 | | |
| 520 to 530 MHz | | | 30 | 56 | | |
| 530 to 575 MHz | | | 40 | 55 | | |
| 575 to 750 MHz | | | 46 | 55 | | |

| | |
|--|--------------------------------|
| Case Style | 3.8 x 3.8 mm Nominal Footprint |
| Lid Symbolization, Y=year, WW=week, S=shift, Dot=pin 1 indicator | B42, YWWS |

Electrical Connections

| Connection | Terminals |
|-------------|------------|
| Input | 2 |
| Output | 6 |
| Case Ground | All others |

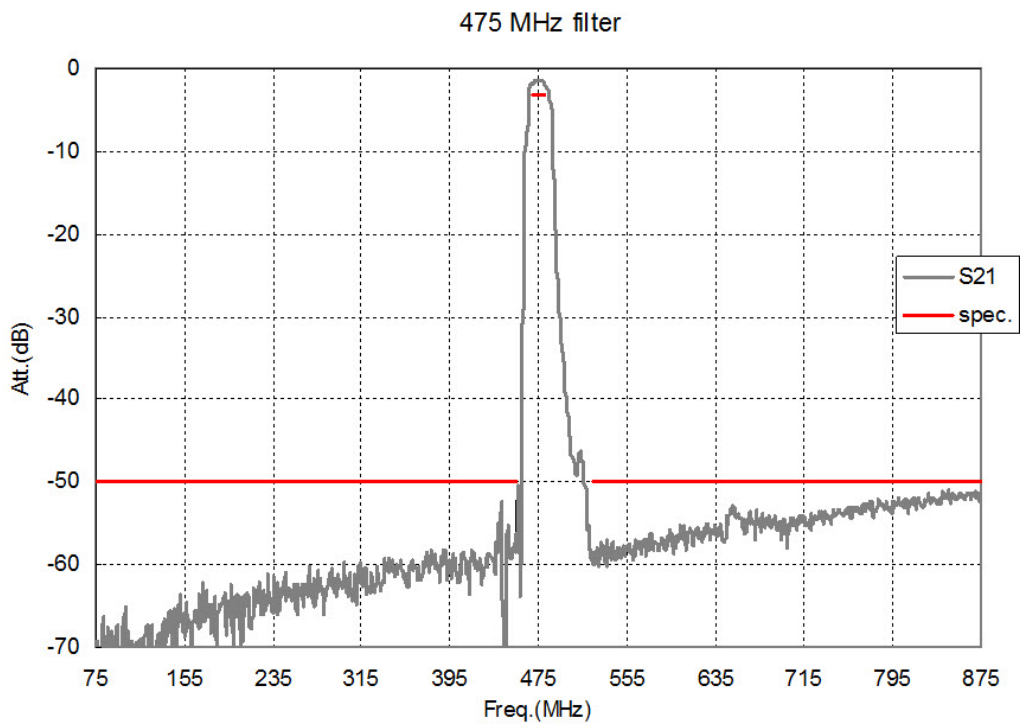
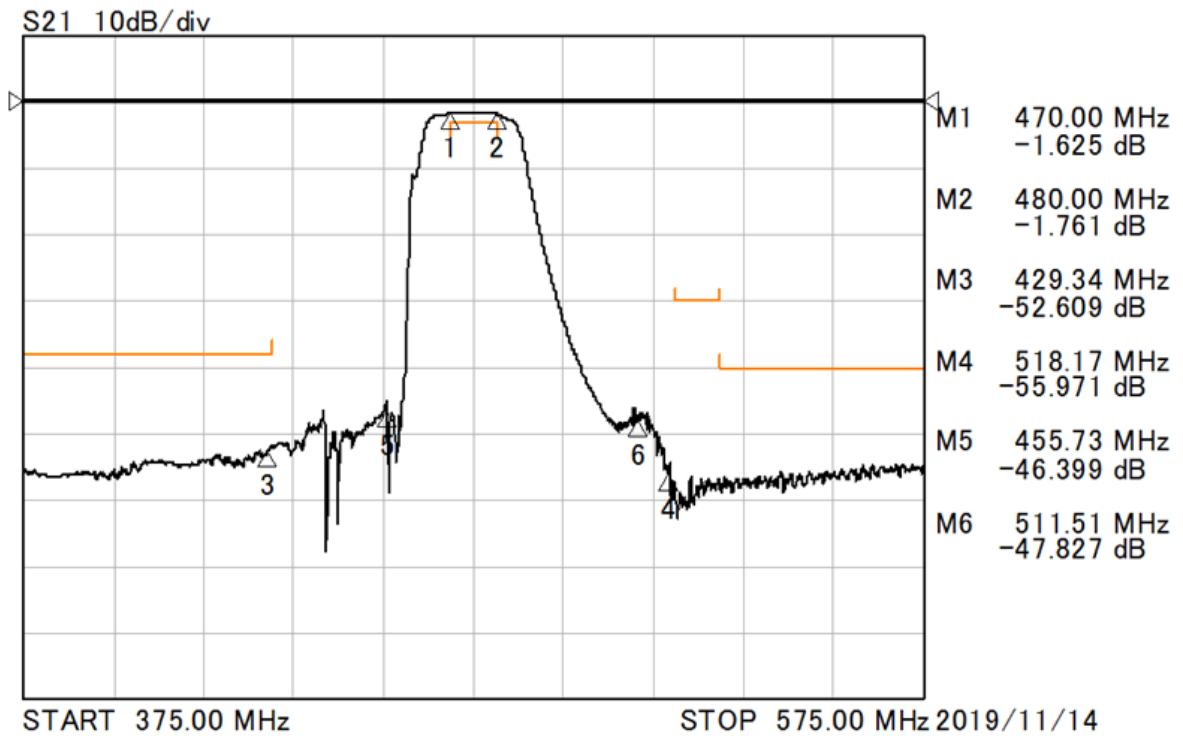


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

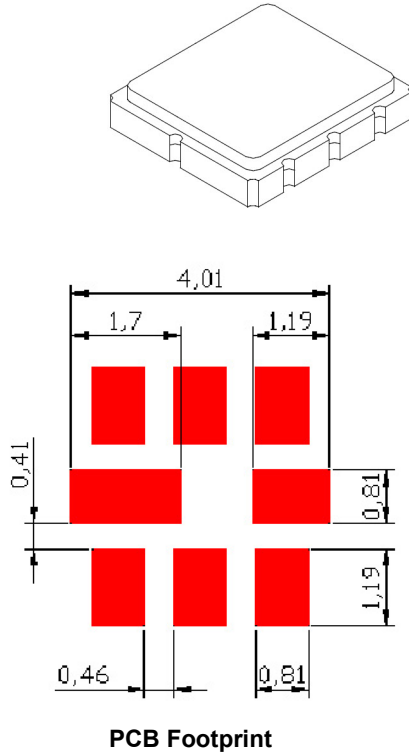
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics



SM3838-8 Case

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

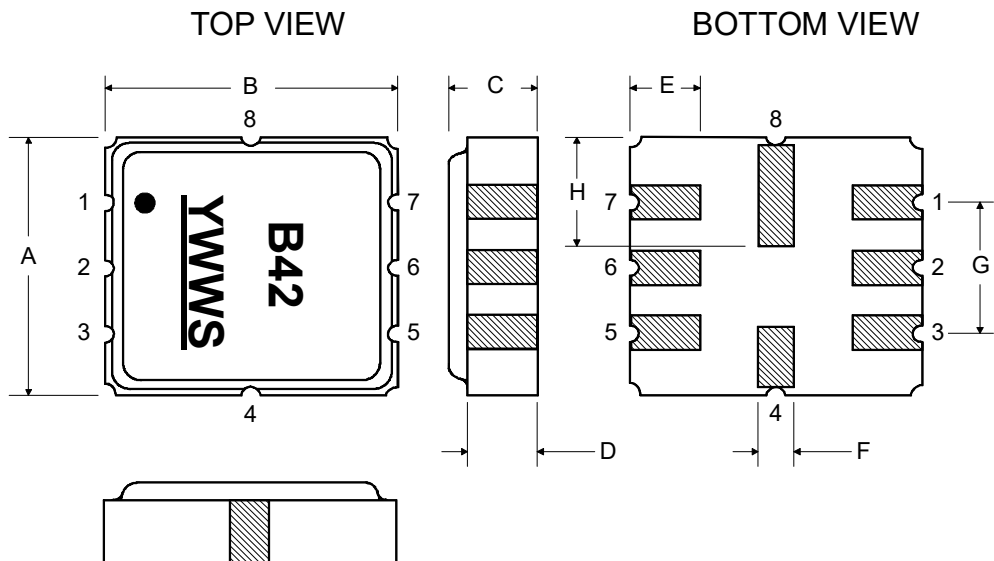


Case Dimensions

| Dimension | mm | | | Inches | | |
|-----------|------|------|------|--------|-------|-------|
| | Min | Nom | Max | Min | Nom | Max |
| A | 3.65 | 3.8 | 3.95 | 0.14 | 0.15 | 0.155 |
| B | 3.65 | 3.8 | 3.95 | 0.14 | 0.15 | 0.155 |
| C | - | - | 1.40 | - | - | 0.055 |
| D | - | 1.10 | - | - | 0.043 | - |
| E | - | 1.0 | - | - | 0.04 | - |
| F | - | 0.6 | - | - | 0.024 | - |
| G | - | 2.54 | - | - | 0.100 | - |
| H | - | 1.50 | - | - | 0.059 | - |

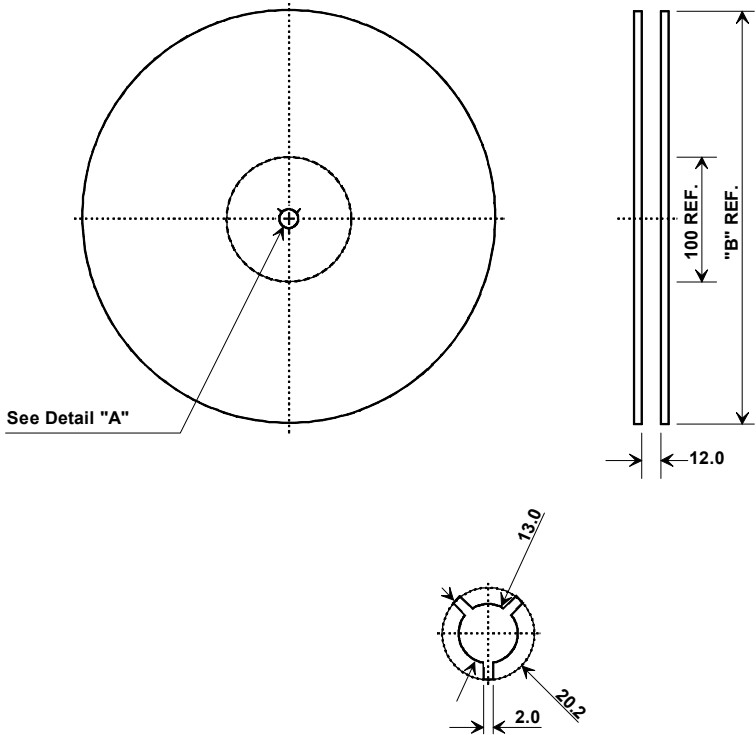
Case Materials

| Materials | |
|--------------------|--|
| Solder Pad Plating | 0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel |
| Lid Plating | 2.0 to 3.0 μm Nickel |
| Body | Al_2O_3 Ceramic |



Tape and Reel Specifications

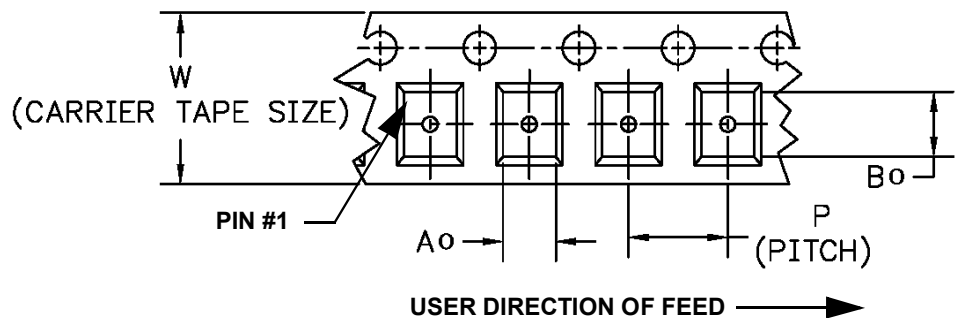
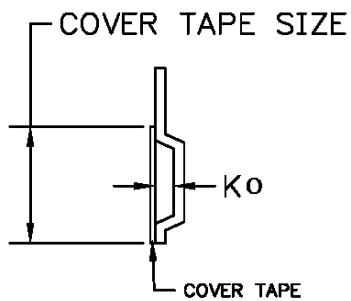
Tape and Reel Standard per ANSI/EIA-481



| "B" Nominal Size | | Quantity Per Reel |
|------------------|-------------|-------------------|
| Inches | millimeters | |
| 7 | 178 | 500 |
| 13 | 330 | 3000 |

COMPONENT ORIENTATION and DIMENSIONS

| Carrier Tape Dimensions | |
|-------------------------|---------|
| Ao | 4.25 mm |
| Bo | 4.25 mm |
| Ko | 1.3 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.

