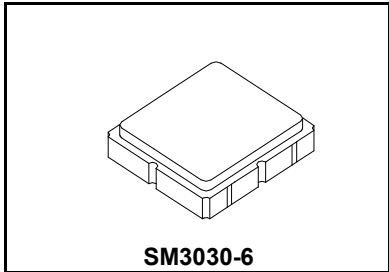


SF2137E

**869.00 MHz
SAW Filter**



- Steep Roll-off Filter for 869.00 MHz Unlicensed Band
- Complies with Directive 2002/95/EC (RoHS)
- No Matching Required for Operation in 50Ω Environment



Absolute Maximum Ratings

| Rating | Value | Units |
|--|------------|-------|
| Input Power Level | 17 | dBm |
| DC Voltage on any Non-ground Terminal | 3 | V |
| Operating Temperature Range | -40 to +85 | °C |
| Storage Temperature Range in Tape and Reel | -40 to +85 | °C |
| Maximum Soldering Profile, 5 Cycles/10 seconds Maximum | 265 | °C |

Electrical Characteristics

| Characteristic | Sym | Notes | Min | Typ | Max | Units |
|----------------------------------|-------|-------|-----|--------|-----|-------------------|
| Center Frequency | f_c | | | 869.00 | | MHz |
| Bandwidth, 1 dB | | | | 11 | | |
| Bandwidth, 3 dB | | | | 17 | | |
| Insertion Loss, 868 to 870 MHz | IL | | | 2.8 | 4.0 | dB |
| Amplitude Ripple, 868 to 870 MHz | | | | 0.2 | 1.5 | dB _{P-P} |
| Attenuation Referenced to 0 dB: | | | | | | dB |
| 825 to 828 MHz | | | 40 | 47 | | |
| 835 to 842 MHz | | | 30 | 39 | | |
| 891 to 894 MHz | | | 30 | 42 | | |
| 910 to 913 MHz | | | 40 | 47 | | |
| Source Impedance | Z_s | | | 50 | | Ω |
| Load Impedance | Z_L | | | 50 | | Ω |

| | | | |
|--|---|------------------|--|
| Case Style | SM3030-6 3.0 x 3.0 mm Nominal Footprint | | |
| Lid Symbolization, Y=year, WW=week, S=shift, Dot=pin 1 indicator | 711, YWWS | | |
| Standard Reel Quantity | Reel Size 7 Inch | 500 Pieces/Reel | |
| | Reel Size 13 Inch | 3000 Pieces/Reel | |

Electrical Connections

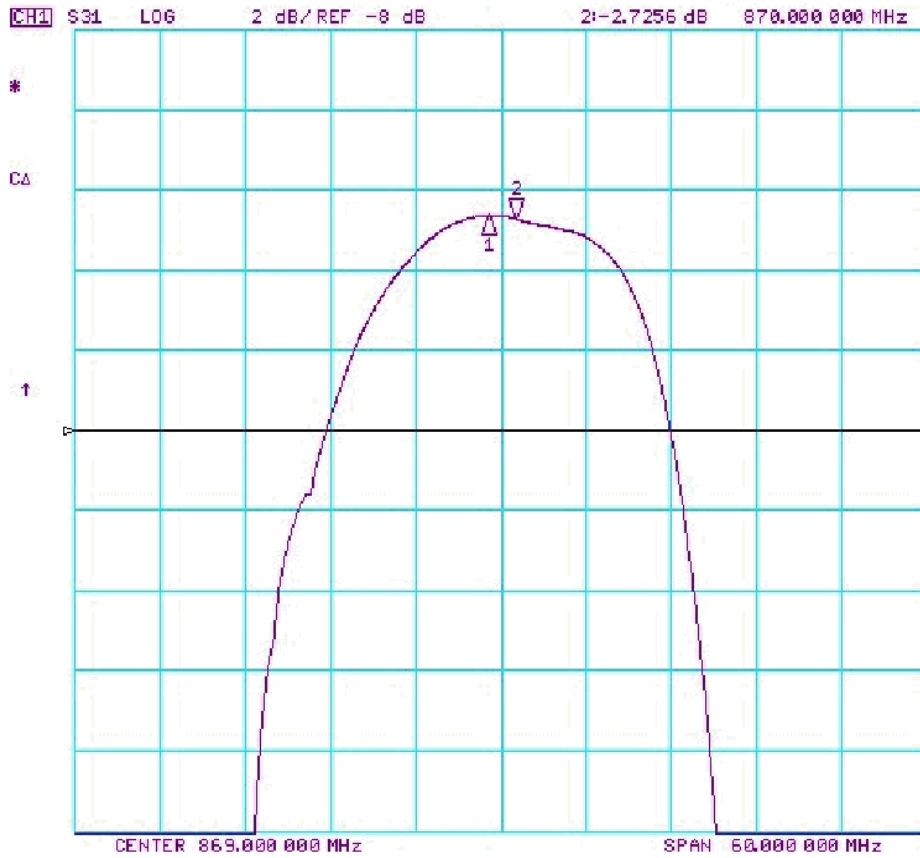
| Connection | Terminals |
|-------------|------------|
| Port 1 | 2 |
| Port 2 | 5 |
| Case Ground | All others |



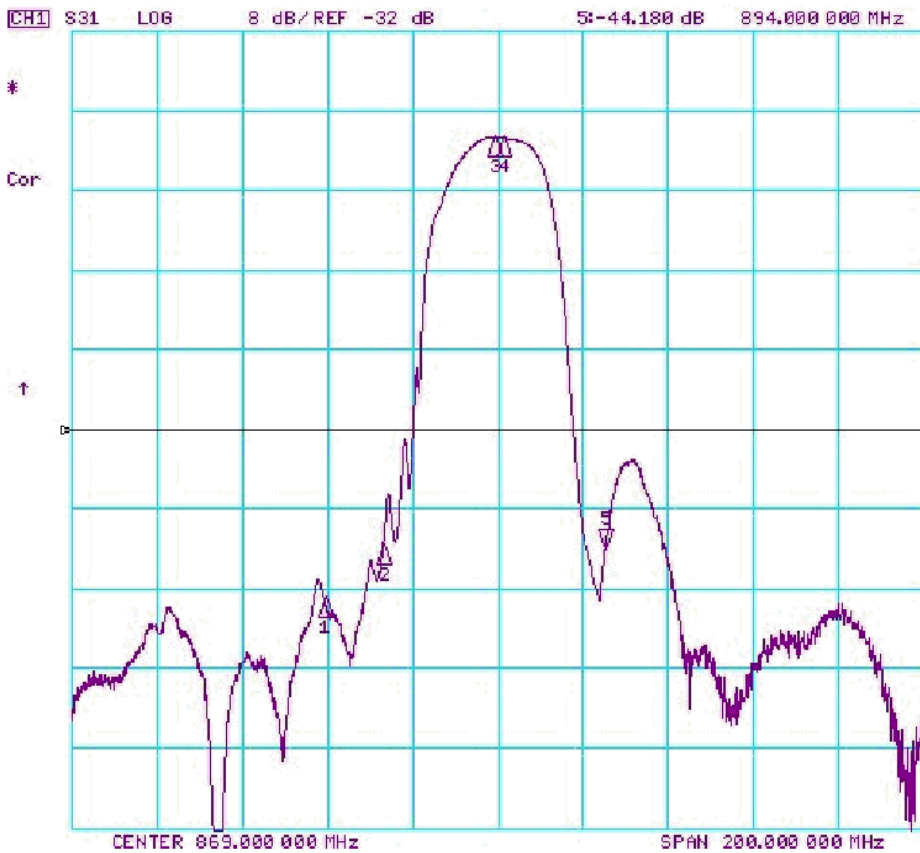
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

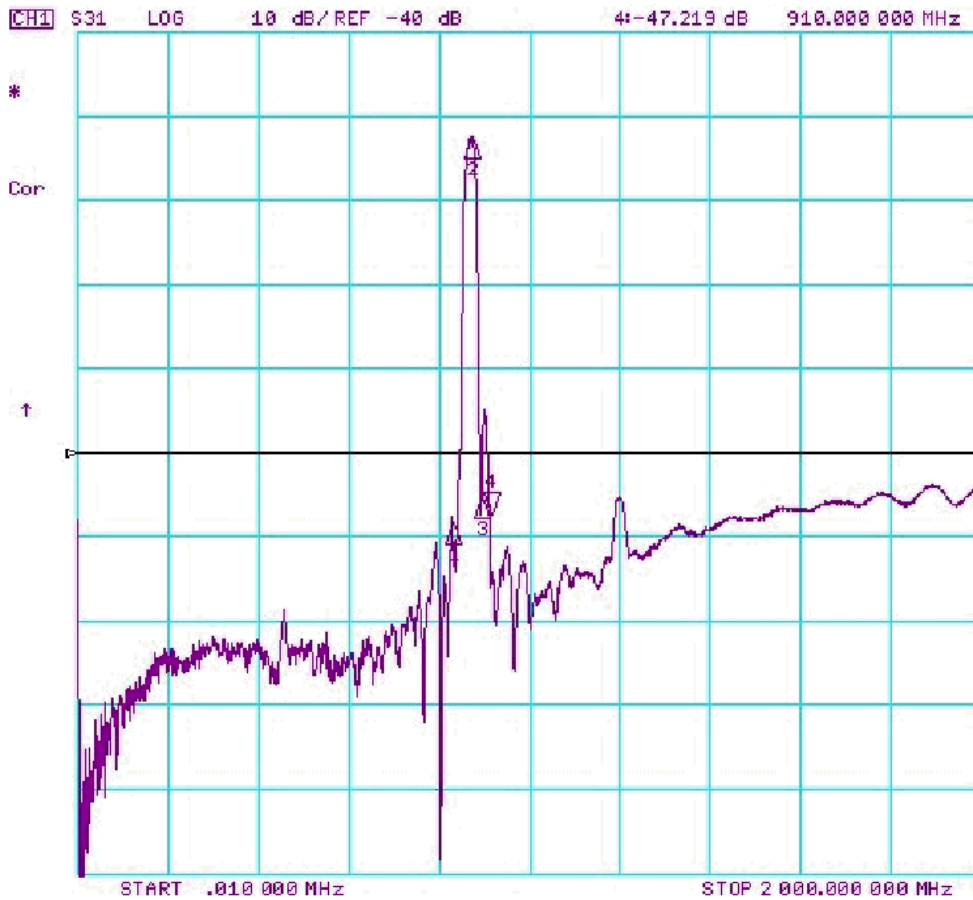
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_c .
3. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
4. The design, manufacturing process, and specifications of this filter are subject to change.
5. US and international patents may apply.
6. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.



CH1 Markers
 1i-2.6412 dB
 868.000 MHz



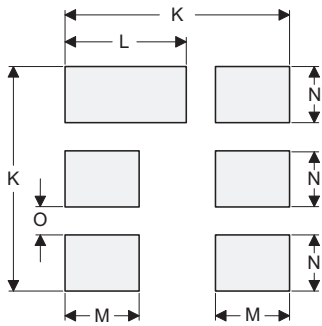
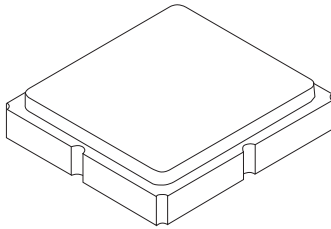
CH1 Markers
 1i-43.024 dB
 828.000 MHz
 2i-43.517 dB
 842.000 MHz
 3i-2.6378 dB
 868.000 MHz
 4i-2.7213 dB
 870.000 MHz



CH1 Markers
 1:-48.523 dB
 820.000 MHz
 2:-2.5911 dB
 869.000 MHz
 3:-45.496 dB
 891.000 MHz

SM3030-6 Case

6-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



PCB Footprint Top View

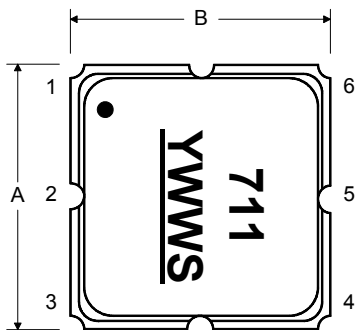
Case and PCB Footprint Dimensions

| Dimension | mm | | | Inches | | |
|-----------|------|------|------|--------|-------|-------|
| | Min | Nom | Max | Min | Nom | Max |
| A | 2.87 | 3.00 | 3.13 | 0.113 | 0.118 | 0.123 |
| B | 2.87 | 3.00 | 3.13 | 0.113 | 0.118 | 0.123 |
| C | 1.12 | 1.25 | 1.38 | 0.044 | 0.049 | 0.054 |
| D | 0.77 | 0.90 | 1.03 | 0.030 | 0.035 | 0.040 |
| E | 2.67 | 2.80 | 2.93 | 0.105 | 0.110 | 0.115 |
| F | 1.47 | 1.60 | 1.73 | 0.058 | 0.063 | 0.068 |
| G | 0.72 | 0.85 | 0.98 | 0.028 | 0.033 | 0.038 |
| H | 1.37 | 1.50 | 1.63 | 0.054 | 0.059 | 0.064 |
| I | 0.47 | 0.60 | 0.73 | 0.019 | 0.024 | 0.029 |
| J | 1.17 | 1.30 | 1.43 | 0.046 | 0.051 | 0.056 |
| K | | 3.20 | | | 0.126 | |
| L | | 1.70 | | | 0.067 | |
| M | | 1.05 | | | 0.041 | |
| N | | 0.81 | | | 0.032 | |
| O | | 0.38 | | | 0.015 | |

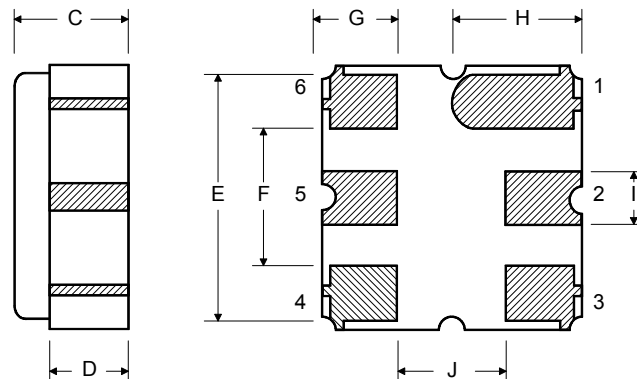
Case Materials

| 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 |
| Pb Free | |

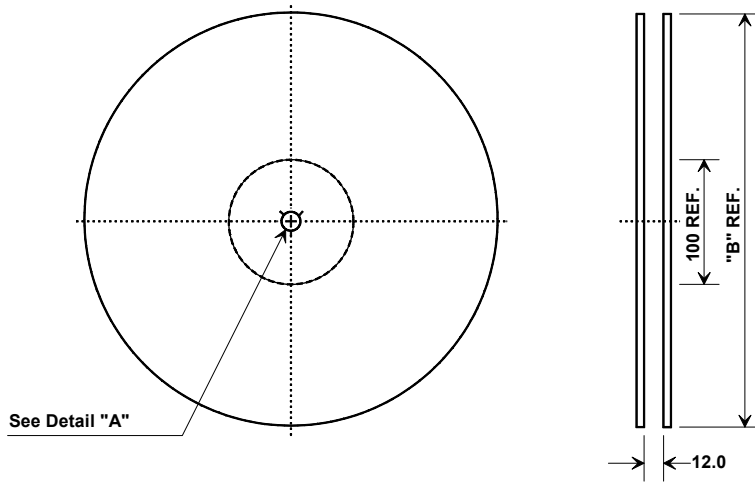
Top View



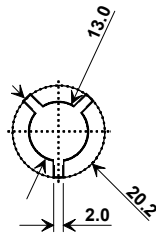
Bottom View



Tape and Reel Specifications

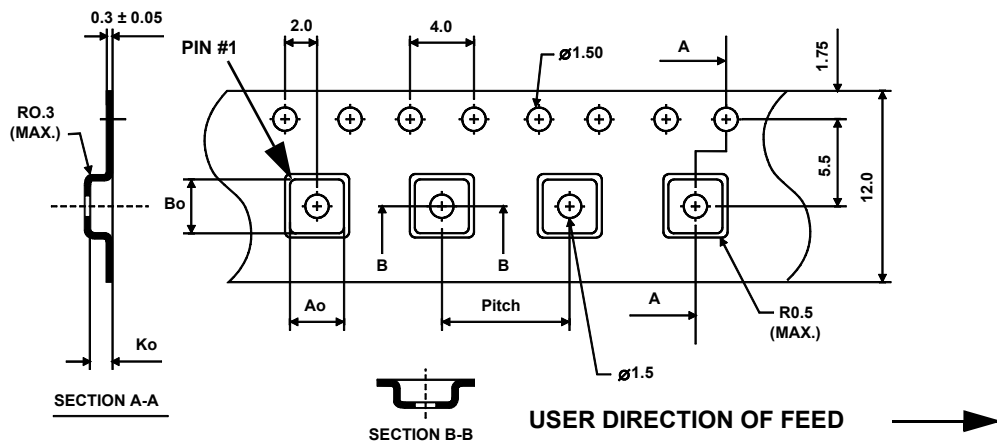


| "B" | | Quantity Per Reel |
|--------|-------------|-------------------|
| Inches | millimeters | |
| 7 | 178 | 500 |
| 13 | 330 | 3000 |

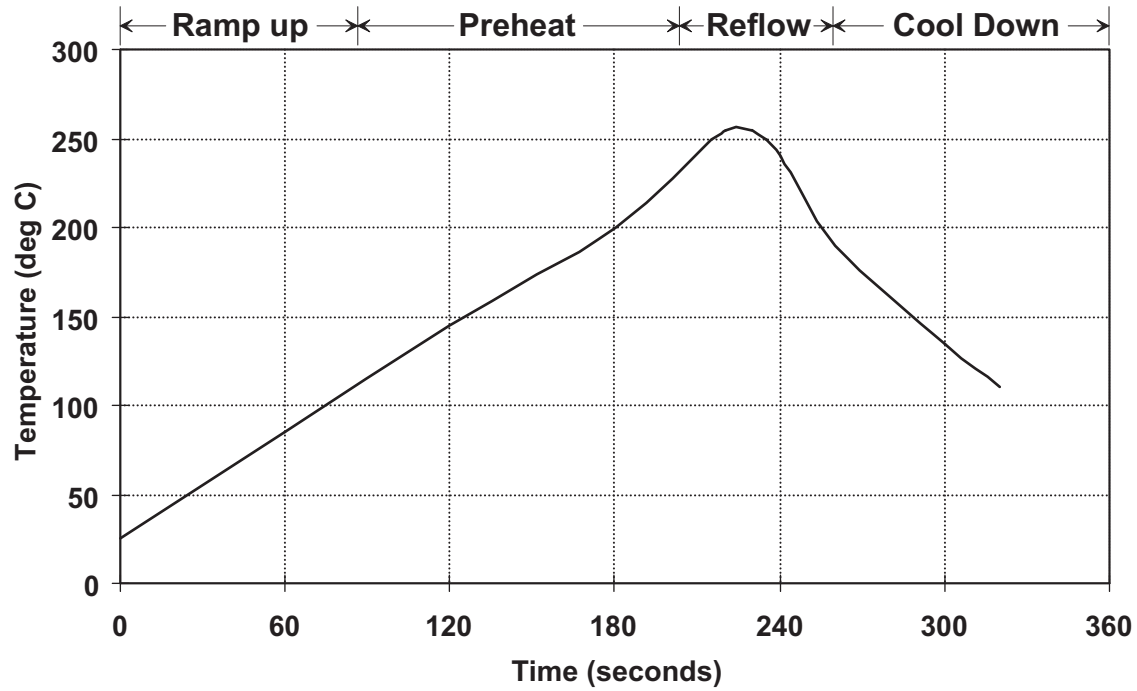


COMPONENT ORIENTATION and DIMENSIONS

| Carrier Tape Dimensions | |
|-------------------------|---------|
| Ao | 3.35 mm |
| Bo | 3.35 mm |
| Ko | 1.40 mm |
| Pitch | 8.0 mm |
| W | 12.0 mm |



Typical Solder Reflow Profile



单击下面可查看定价，库存，交付和生命周期等信息

[>>Murata\(村田\)](#)