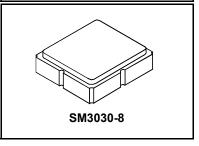


AEC-Q200
RoHS Compliance
This component is compliant with RoHS directive.
This component was always
RoHS compliant from the first date of manufacture.

SF2472E

869 MHz SAW Filter



- Low-loss UHF SAW Filter
- 3.0 x 3.0 mm Surface-mount Package

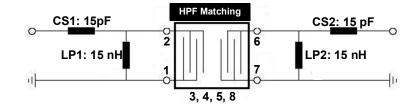
Maximum Rating

| Rating | Value | Units |
|---------------------------------------|-------------|-------|
| DC Voltage on any Non-ground Terminal | 3 | V |
| Operable Temperature Range | -45 to +125 | °C |
| Specification Temperature Range | 0 to +50 | °C |
| Storage Temperature Range | -40 to +85 | °C |
| Moisture Sensitivity Level | 1 | MSL |

| Characteristic | Sym | Notes | Min | Тур | Max | Units |
|---|-------------------|-------|-----|-----|-------|-------|
| Center Frequency | f _C | | | 869 | | MHz |
| Maximum Insertion Loss, 698 to 862 MHz (0 to +25°C) | | | | 1.9 | 2.5 | |
| (+25 to +50°C) | | | | 1.9 | 2.9 | 40 |
| 880 to 960 MHz | IL _{MAX} | | | 1.0 | 2.5 | dB |
| 1710 to 1880 MHz | | | | 1.7 | 2.5 | |
| Attenuation, 0 dB Reference: | | | | | | dР |
| 868 to 870 MHz | | | 20 | 24 | 24 dB | |
| Temperature Coefficient of frequency | | | | -36 | | ppm/k |
| Source Impedance Z _S | | | | 50 | | ohm |
| Load Impedance Z _L | | | | 50 | onm | |

| Case Style | SM3030-8 3.0 x 3.0 mm Nominal Footprint | |
|--|---|--|
| Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator | B7 <u>, YWWS</u> | |
| Standard Reel Quantity Reel Size 7 inch | 500 Pieces/Reel | |
| Reel Size 13 inch | 3000 Pieces/Reel | |

| Electrical Connections | | | | |
|------------------------|------------------|--|--|--|
| Input | 2 | | | |
| Output | 6 | | | |
| All Others | 1, 3, 4, 5, 7, 8 | | | |

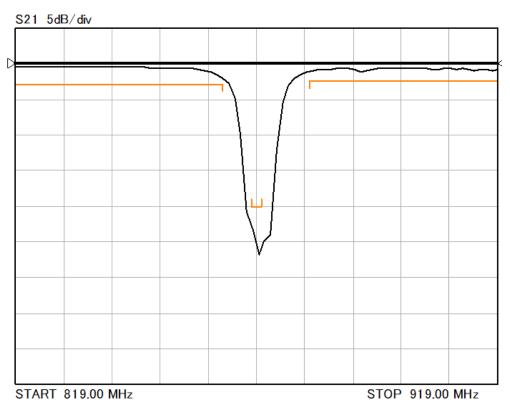


NOTES:

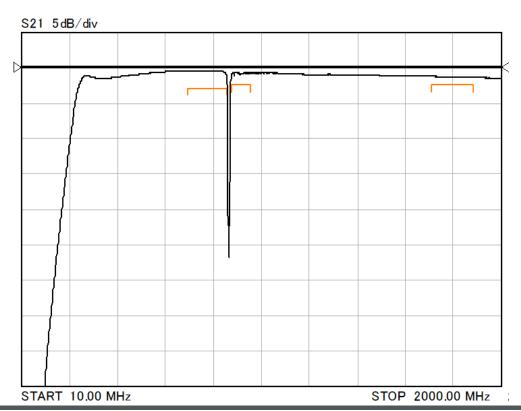
- 1. US and international patents may apply.
- 2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
- 3. Electrostatic Sensitive Device. Observe precautions for handling.

Transfer Function

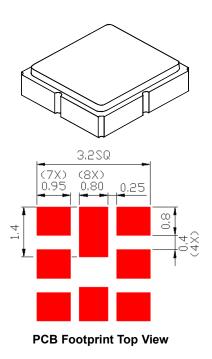
Span: 100 MHz



Span: 2000 MHz



8-Terminal Ceramic Surface-Mount Case 3.0 x 3.0 mm Nominal Footprint



Case and PCB Footprint Dimensions

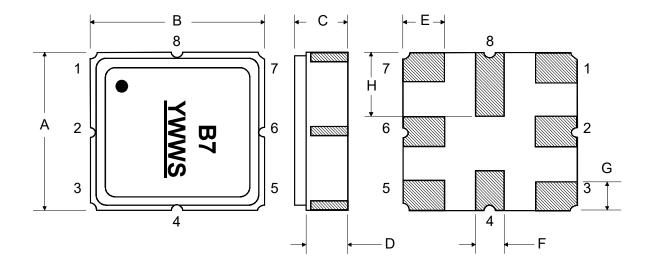
| Dimension | mm | | | Inches | | |
|-------------|------|------|------|--------|-------|-------|
| Difficusion | Min | Nom | Max | Min | Nom | Max |
| Α | 2.90 | 3.00 | 3.10 | 0.114 | 0.118 | 0.122 |
| В | 2.90 | 3.00 | 3.10 | 0.114 | 0.118 | 0.122 |
| С | 0.90 | 1.00 | 1.10 | 0.035 | 0.039 | 0.043 |
| D | 0.79 | 0.92 | 1.05 | 0.031 | 0.036 | 0.041 |
| E | 0.62 | 0.75 | 0.88 | 0.024 | 0.029 | 0.034 |
| F | 0.47 | 0.60 | 0.73 | 0.018 | 0.023 | 0.028 |
| G | 0.50 | 0.60 | 0.70 | 0.019 | 0.023 | 0.027 |
| Н | 1.10 | 1.20 | 1.30 | 0.043 | 0.047 | 0.051 |

Case Materials

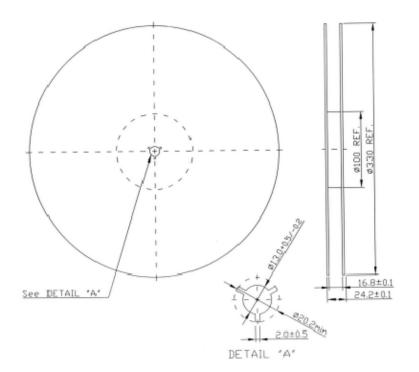
| Materials | | | | | |
|-----------------------|--|--|--|--|--|
| Solder Pad Plating | 0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel | | | | |
| Lid Plating | 2.0 to 3.0 µm Nickel | | | | |
| Body | Al ₂ O ₃ Ceramic | | | | |
| Pb Free | | | | | |

TOP VIEW

BOTTOM VIEW



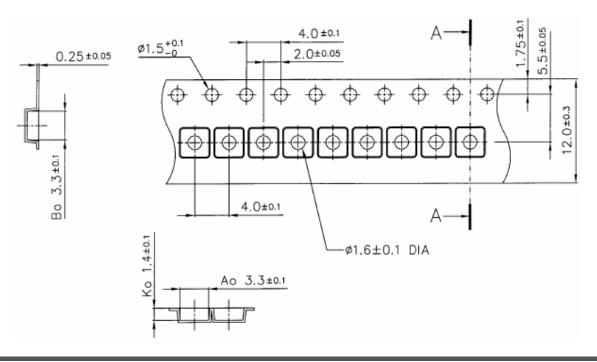
Tape and Reel Specifications



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

| Carrier Tape Dimensions | | | | | |
|-------------------------|---------|--|--|--|--|
| Ao | 3.35 mm | | | | |
| Во | 3.35 mm | | | | |
| Ko | 1.4 mm | | | | |
| Pitch | 8.0 mm | | | | |
| W | 12.0 mm | | | | |

COMPONENT ORIENTATION and DIMENSIONS



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 (20~40sec).
- 4. Time: 2 times.

