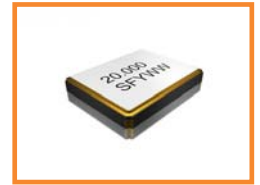


| FEATURES | APPLICATIONS |
|---|--|
| <ul style="list-style-type: none"> ±10ppm/±10ppm (Tolerance/Stability) Available Ultra-Miniature Package AT-Cut Fundamental RoHS Compliant Tape and Reel | <ul style="list-style-type: none"> High Density Applications PCMCIA Wireless Applications Computers and Modems |



| PART NUMBERING GUIDE | |
|---|---|
| <p>SUNTSU CRYSTAL → SXT 32 4 18 A A 48 T- 24.000M ← FREQUENCY (MHz)</p> <p>3.2mm x 2.5mm</p> <p>4 PAD</p> <p>LOAD CAPACITANCE S: SERIES 7 - 32: 7pF - 32pF</p> <p>FREQUENCY TOLERANCE A: ±50ppm B: ±30ppm C: ±25ppm D: ±20ppm E: ±15ppm F: ±10ppm</p> <p>Cage Code: 4GUT4 To customize your parameters contact a Suntsu representative. * For frequency stability option F contact a Suntsu representative. ** For operating temperatures up to -55~125°C contact a Suntsu representative.</p> | <p>MODE OF OPERATION BLANK: FUNDAMENTAL T: THIRD OVERTONE</p> <p>OPERATING TEMPERATURE RANGE** 07: 0°C to + 70°C 16: -10°C to + 60°C 17: -10°C to + 70°C 27: -20°C to + 70°C 38: -30°C to + 85°C 48: -40°C to + 85°C</p> <p>FREQUENCY STABILITY A: ±50ppm B: ±30ppm C: ±25ppm D: ±20ppm E: ±15ppm F: ±10ppm*</p> |

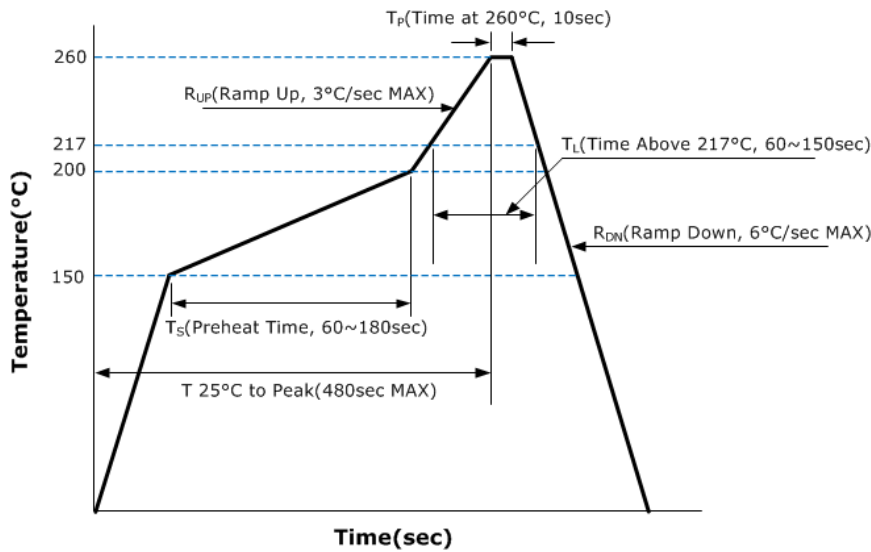
| ELECTRICAL PARAMETERS | | UNITS | MIN. | TYP. | MAX. | REMARKS |
|---|-----------------------|-------|------|------|------|---------------------------------------|
| Frequency Range | | MHz | 12 | | 70 | AT-Cut Fundamental. |
| | | | 60 | | 170 | 3 rd Overtone. |
| Frequency Tolerance at +25°C | | ppm | -10 | | +10 | See part numbering guide for options. |
| Frequency Stability vs. Operating Temperature (Ref. 25°C) | | ppm | -10 | | +10 | See part numbering guide for options. |
| vs. Aging | | | -2 | | +2 | First year @ +25°C. |
| Operating Temperature | | °C | -40 | | +85 | See part numbering guide for options. |
| Storage Temperature | | °C | -40 | | +125 | |
| Load Capacitance | | pF | 7 | | 32 | See part numbering guide for options. |
| Shunt Capacitance | | pF | | | 5 | |
| Drive Level | | μW | | 10 | 100 | |
| Insulation Resistance | | MΩ | 500 | | | @ 100V _{dc} ± 15V. |
| Equivalent Series Resistance | 12.000MHz ~ 15.999MHz | Ω | | | 100 | AT-Cut Fundamental. |
| | 16.000MHz ~ 19.999MHz | | | | 70 | AT-Cut Fundamental. |
| | 20.000MHz ~ 29.999MHz | | | | 50 | AT-Cut Fundamental. |
| | 30.000MHz ~ 49.999MHz | | | | 40 | AT-Cut Fundamental. |
| | 50.000MHz ~ 70.000MHz | | | | 35 | AT-Cut Fundamental. |
| | 60.000MHz ~ 170.00MHz | | | | 80 | 3 rd Overtone. |

| OUTLINE DRAWING | | |
|---------------------------------------|---|--|
| | <p>ELECTRODE ARRANGEMENT (BOTTOM VIEW)</p> | <p>RECOMMENDED LAND PATTERN</p> |
| NOTE: Dimensions in millimeters (mm). | | |

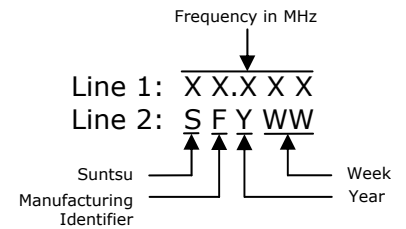
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

| | |
|------------------------------|---------------------------------------|
| Temperature Cycling | MIL-STD-883, Method 1010, Condition B |
| Fine Leak Test | MIL-STD-883, Method 1014, Condition A |
| Gross Leak Test | MIL-STD-883, Method 1014, Condition C |
| Mechanical Shock | MIL-STD-883, Method 2002, Condition B |
| Vibration | MIL-STD-883, Method 2007, Condition A |
| Moisture Resistance | MIL-STD-883, Method 1004 |
| Moisture Sensitivity | J-STD-020, MSL 1 |
| Resistance to Soldering Heat | MIL-STD-202, Method 210, Condition K |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Solderability | MIL-STD-883, Method 2003 |

REFLOW PROFILE

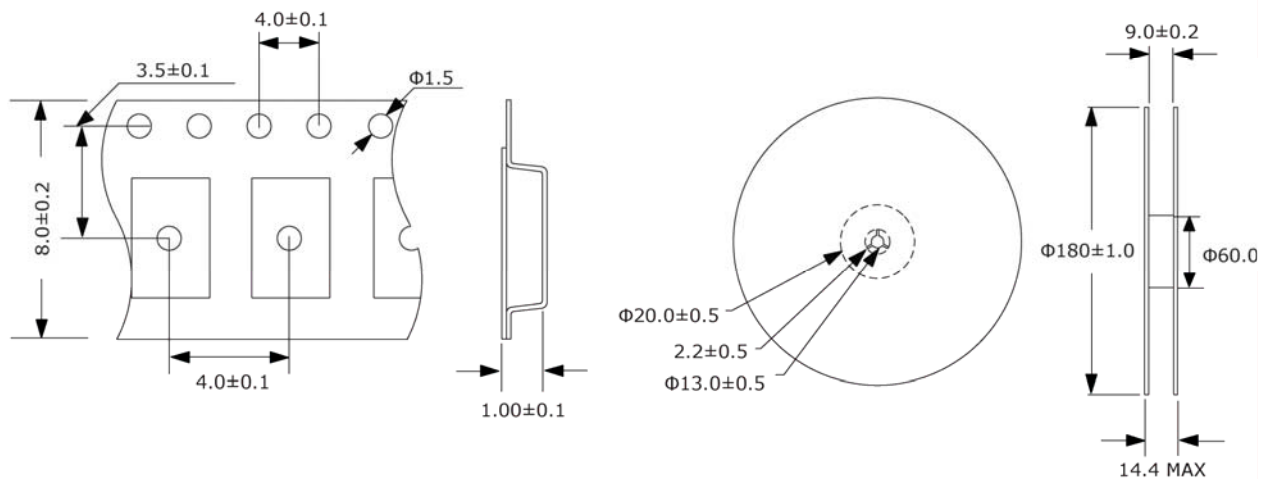


MARKING



TAPE AND REEL DIMENSIONS

3,000pcs/reel



NOTE: Dimensions in millimeters (mm); drawing is not to scale.