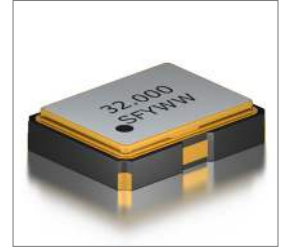
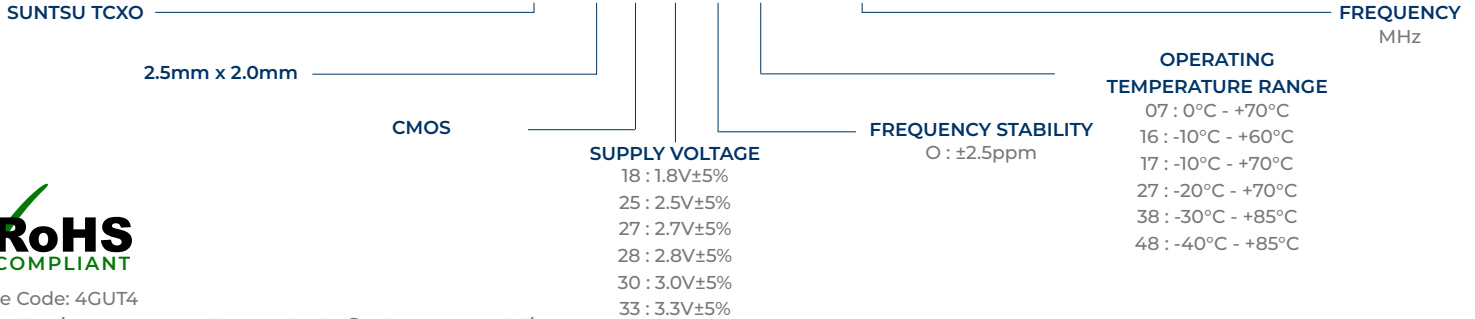


| Features |
|--|
| <ul style="list-style-type: none"> ±2.5ppm (Frequency Stability) Available CMOS TCXO Tape and Reel |

| Applications |
|--|
| <ul style="list-style-type: none"> Base Stations IP networking Cellular and Cordless Phones |


Part Numbering Guide
STC 22 C 33 O 48 - 32.000M


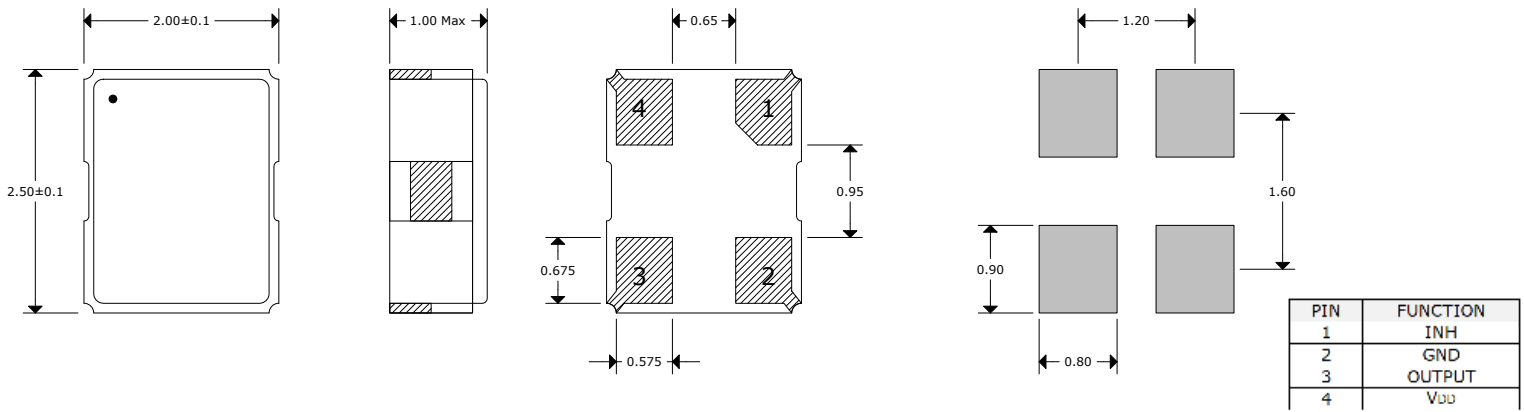
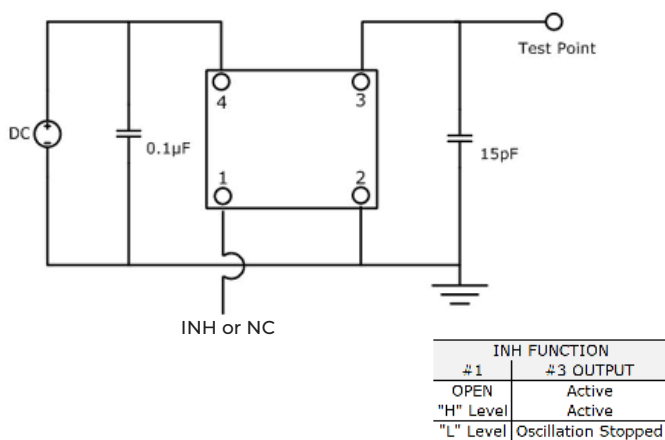
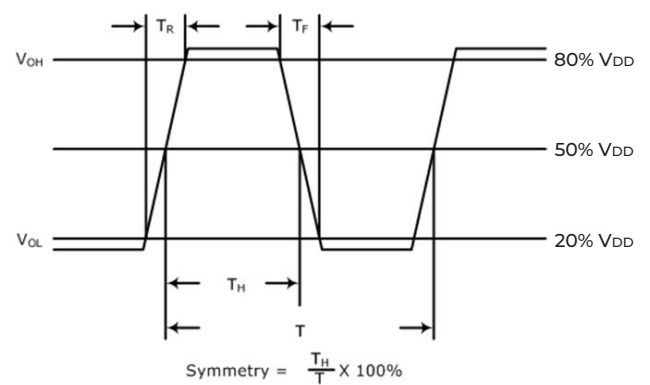
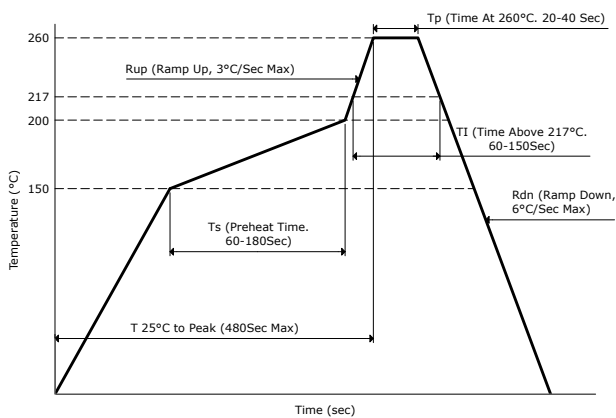
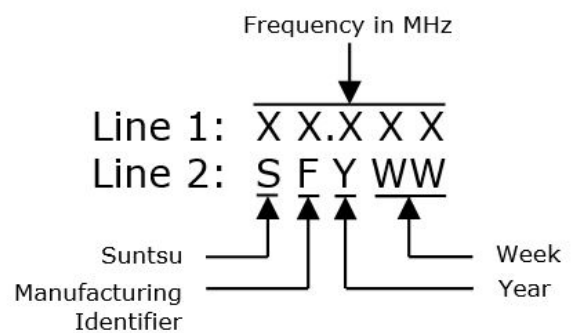
Cage Code: 4GUT4

To customize your parameters contact a Suntsu representative.

| Electrical Parameters | Units | Minimum | Typical | Maximum | Remarks |
|--|--------|---------------------|---------|---------------------|---------------------------------------|
| Frequency Range | MHz | 8 | | 70 | |
| Frequency Tolerance at +25°C | ppm | -2.0 | | 2.0 | After 2 times reflow |
| Freq. Stability vs. Op Temp. | ppm | -2.5 | | 2.5 | See part numbering guide for options. |
| Freq. Stability vs. Supply Voltage | ppm | -0.2 | | 0.2 | V _{DD} ±5% Change |
| Freq. Stability vs. Load | ppm | -0.2 | | 0.2 | ±5% Change |
| Freq. Stability vs. Aging | ppm | -2.0 | | 2.0 | 1 Year |
| Operating Temperature | °C | -40 | | 85 | See part numbering guide for options. |
| Storage Temperature | °C | -55 | | 125 | |
| Supply Voltage (V _{DD}) - 1.8V Option | V | 1.710 | 1.8 | 1.890 | |
| Supply Voltage (V _{DD}) - 2.5V Option | V | 2.375 | 2.5 | 2.625 | |
| Supply Voltage (V _{DD}) - 2.7V Option | V | 2.565 | 2.7 | 2.835 | |
| Supply Voltage (V _{DD}) - 2.8V Option | V | 2.66 | 2.8 | 2.94 | |
| Supply Voltage (V _{DD}) - 3.0V Option | V | 2.85 | 3.0 | 3.15 | |
| Supply Voltage (V _{DD}) - 3.3V Option | V | 3.125 | 3.3 | 3.465 | |
| Current (I _{DD}) | mA | | | 10 | |
| Output Load (CMOS) | pF | | 15 | | |
| Output Logic HIGH Level (V _{OH}) | V | 0.8*V _{DD} | | | |
| Output Logic LOW Level (V _{OL}) | V | | | 0.2*V _{DD} | |
| Rise (T _R) And Fall (T _F) Time | ns | | | 5 | |
| Symmetry (Duty Cycle) | % | 45 | | 55 | |
| Start-Up Time | ms | | | 10 | |
| Phase Noise (Typical) 10KHz Offset | dBc/Hz | | -145 | | |

Outline Drawing & Recommended Land Pattern

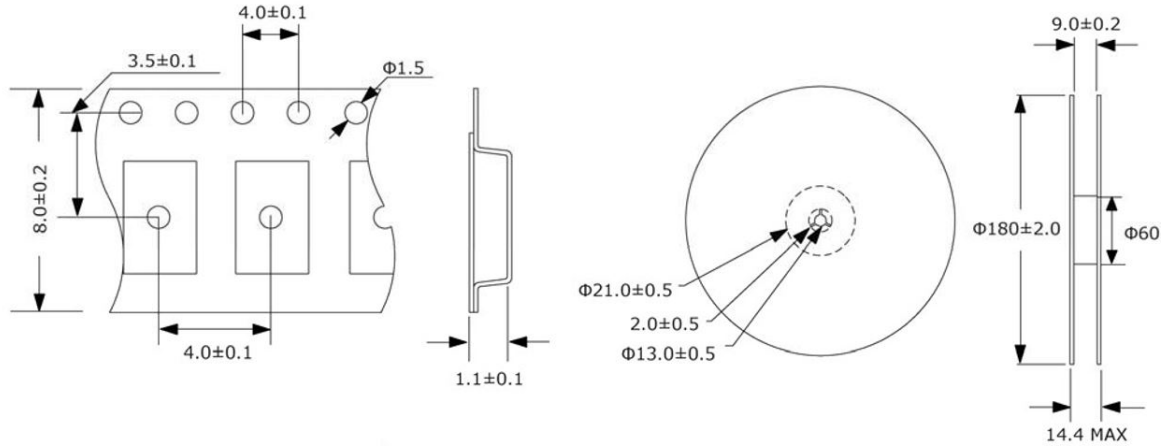
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.


Test Circuit (CMOS)

Waveform (CMOS)

Reflow Profile

Part Marking


Tape And Reel Dimensions

All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.

3,000pcs/Reel


Environmental 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 |
| Solderability | MIL-STD-883, Method 2003 |
| Moisture Sensitivity | J-STD-020, MSL 1 |

Mechanical Specifications

| | |
|------------------------------|---------------------------------------|
| Mechanical Shock | MIL-STD-202, Method 213, Condition B |
| Vibration | MIL-STD-883, Method 2007, Condition A |
| Moisture Resistance | MIL-STD-883, Method 1004 |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Resistance to Soldering Heat | MIL-STD-202, Method 210, Condition K |