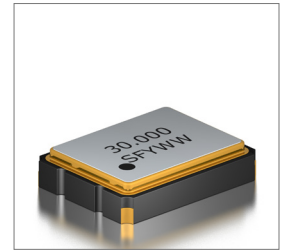


| Features |
|---|
| <ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package CMOS Programmed VCXO Tape and Reel |

| Applications |
|--|
| <ul style="list-style-type: none"> Micro Processors FPGA Storage Area/Networking Digital Video Portable Computers |


Part Numbering Guide
SQV 32 C 3 A 48 A 2 - 30.000M

 SUNTSU QUICK
 TURN VCXO

3.2mm x 2.5mm

CMOS

SUPPLY VOLTAGE

2 : 2.5V±5%

3 : 3.3V±5%

FREQUENCY STABILITY

A : ±50ppm

B : ±30ppm

C : ±25ppm

D : ±20ppm

*E : ±15ppm

**OPERATING
 TEMPERATURE RANGE**

07 : 0°C - +70°C

16 : -10°C - +60°C

17 : -10°C - +70°C

27 : -20°C - +70°C

38 : -30°C - +85°C

48 : -40°C - +85°C

PULLABILITY

A : ±150ppm

B : ±100ppm

C : ±80ppm

D : ±50ppm

FREQUENCY
 MHz

**TRI-STATE
 (ENABLE/DISABLE)**

BLANK : No Connect

2 : Pin 2



Cage Code: 4GUT4

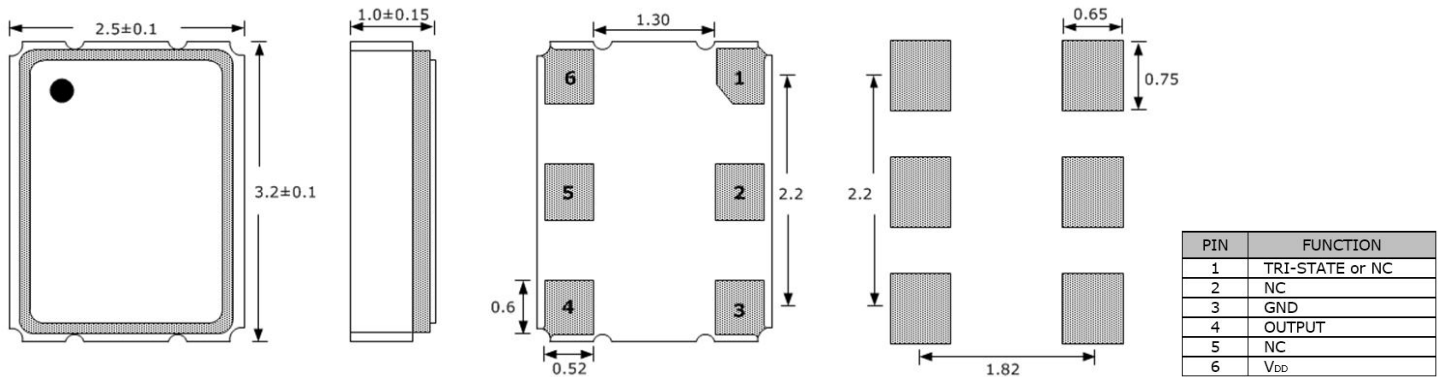
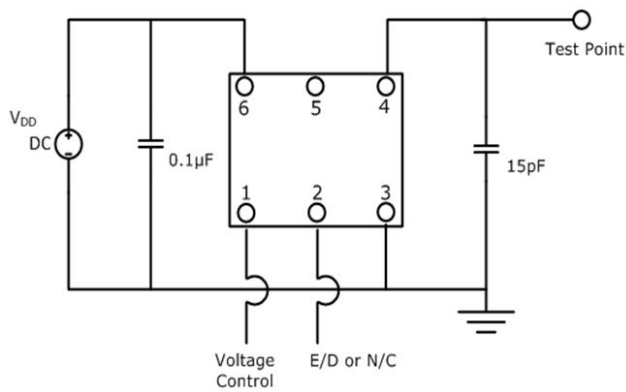
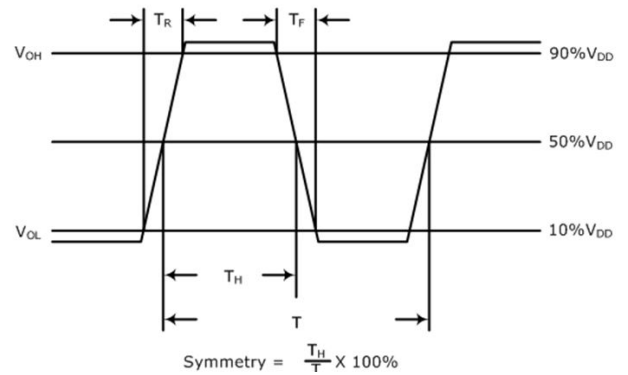
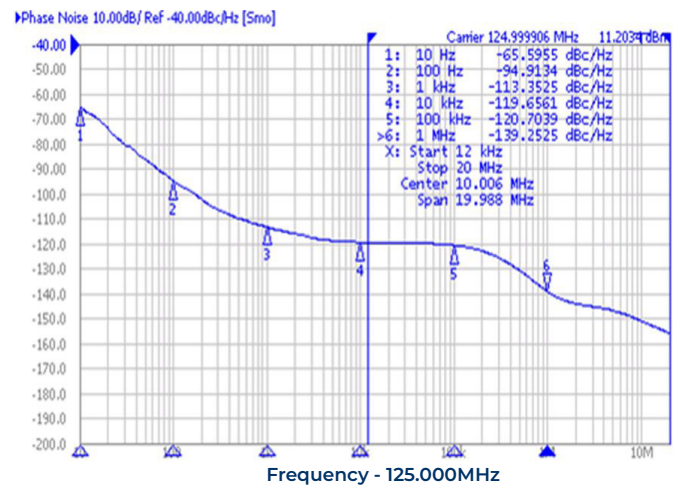
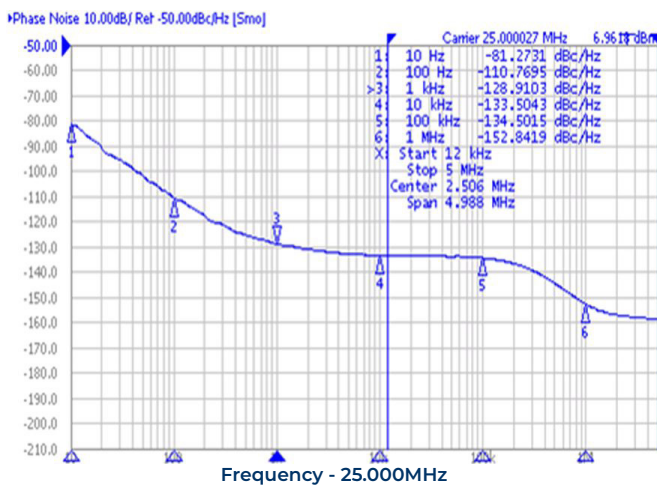
To customize your parameters contact a Suntsu representative.

* For frequency stability option E contact a Suntsu representative.

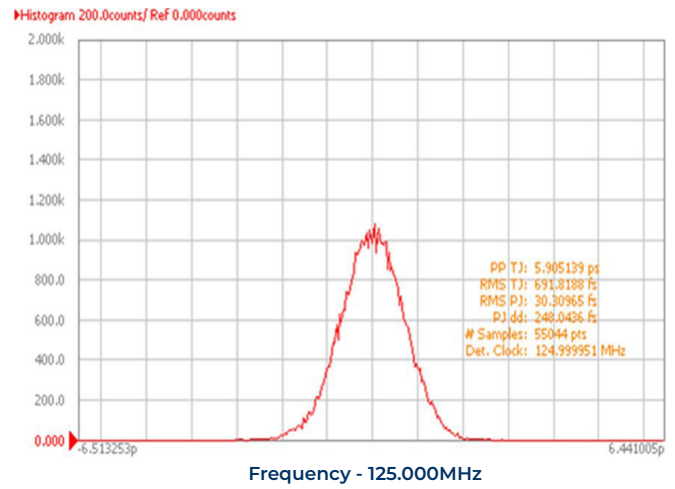
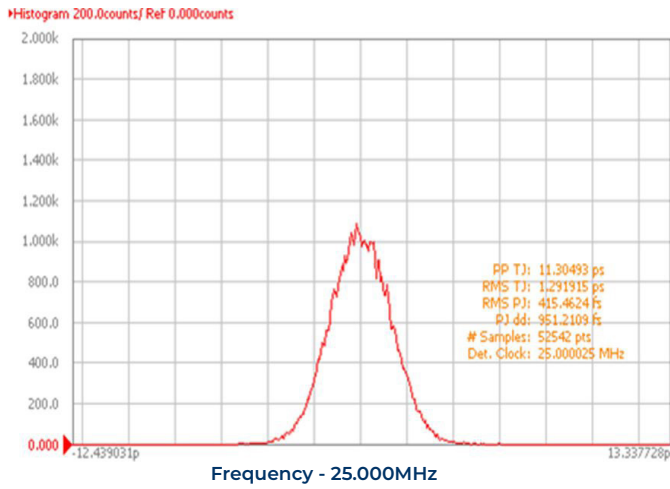
| Electrical Parameters | Units | Minimum | Typical | Maximum | Remarks |
|--|-------|---------------------|---------|---------------------|---------------------------------------|
| Frequency Range | MHz | 8 | | 1500 | |
| Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.) | ppm | -20 | | +20 | See part numbering guide for options. |
| Operating Temperature | °C | -40 | | +85 | See part numbering guide for options. |
| Storage Temperature | °C | -55 | | +125 | |
| Supply Voltage (V _{DD}) 2.5V Option | V | 2.375 | 2.5 | 2.625 | |
| Supply Voltage (V _{DD}) 3.3V Option | V | 3.135 | 3.3 | 3.465 | |
| Current (I _{DD}) 2.5V Option | mA | | | 35 | |
| Current (I _{DD}) 3.3V Option | mA | | | 45 | |
| Current Voltage (V _C) 2.5V Option | V | 0 | | 2.5 | |
| Current Voltage (V _C) 3.3V Option | V | 0 | | 3.3 | |
| Pullability | ppm | ±50 | ±100 | ±150 | See part numbering guide for options. |
| Linearity | % | | | 10 | |
| Output Load (CMOS) | pF | | | 15 | |
| Output Logic HIGH Level (V _{OH}) | V | 0.9*V _{DD} | | | |
| Output Logic LOW Level (V _{OL}) | V | | | 0.1*V _{DD} | |
| Rise (T _R) And Fall (T _F) Time | ns | | | 3 | |
| Symmetry (Duty Cycle) | % | 45 | 50 | 55 | |
| Tri-State Input Voltage - Enable | V | 0.7*V _{DD} | | | |
| Tri-State Input Voltage - Disable | V | | | 0.3*V _{DD} | |
| Start-Up Time | ms | | | 10 | |
| Phase Jitter (12KHz ~ 20MHz) | ps | | 0.7 | 1.5 | |

Outline Drawing & Land Pattern

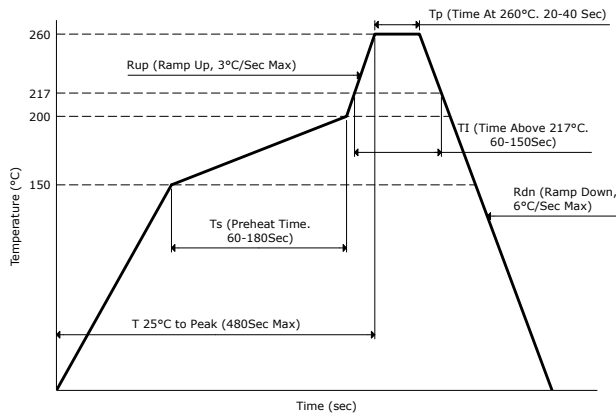
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.


Test Circuit (CMOS)

Waveform (CMOS)

Typical Phase Noise Performance (Measured By Agilent E5052A)


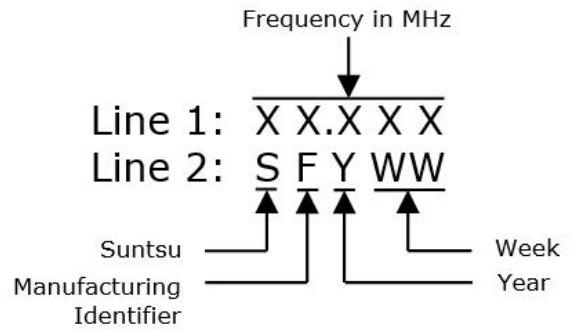
Typical Jitter Performance (Measured By Agilent E5052A)



Reflow Profile



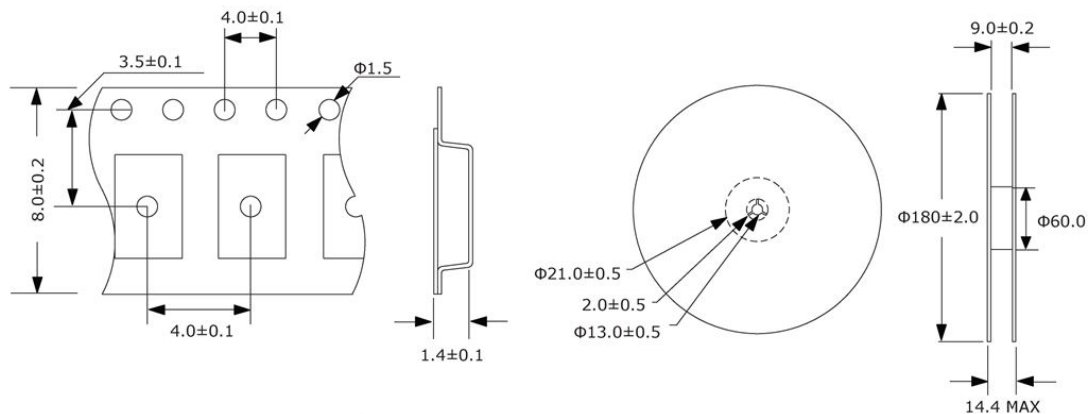
Part Marking



Tape And Reel Dimensions

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

3,000pcs/Reel



| Environmental Specifications | | Mechanical Specifications | |
|------------------------------|---------------------------------------|------------------------------|---------------------------------------|
| Temperature Cycling | MIL-STD-883, Method 1010, Condition B | Mechanical Shock | MIL-STD-202, Method 213, Condition B |
| Fine Leak Test | MIL-STD-883, Method 1014, Condition A | Vibration | MIL-STD-883, Method 2007, Condition A |
| Gross Leak Test | MIL-STD-883, Method 1014, Condition C | Moisture Resistance | MIL-STD-883, Method 1004 |
| Solderability | MIL-STD-883, Method 2003 | Resistance to Solvents | MIL-STD-202, Method 215 |
| Moisture Sensitivity | J-STD-020, MSL 1 | Resistance to Soldering Heat | MIL-STD-202, Method 210, Condition K |