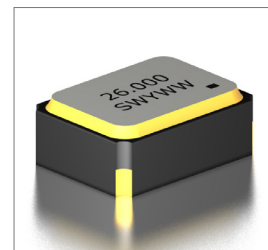


Features

- $\pm 0.5\text{ppm}$ (Frequency Stability) Available
- Clipped Sinewave
- (VC)TCXO
- Tape and Reel

Applications

- GPS
- Mobile Communication Equipment
- Cellular And Cordless Phones
- IP Networking



Part Numbering Guide

STC 11 K 30 R 48 V E - 26.000M

SUNTSU TCXO

1.6mm x 1.2mm

CLIPPED SINEWAVE

SUPPLY VOLTAGE

18 : 1.8V $\pm 5\%$
25 : 2.5V $\pm 5\%$
27 : 2.7V $\pm 5\%$
28 : 2.8V $\pm 5\%$
30 : 3.0V $\pm 5\%$
33 : 3.3V $\pm 5\%$

FREQUENCY STABILITY

P : $\pm 2.0\text{ppm}$
Q : $\pm 1.5\text{ppm}$
R : $\pm 1.0\text{ppm}$
F : $\pm 0.5\text{ppm}$

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

TCXO/VCTCXO
BLANK : TCXO
V : VCTCXO

FREQUENCY
MHz

PULLABILITY

BLANK : TCXO
H : $\pm 16.00\text{ppm}$
I : $\pm 7.0\text{ppm}$

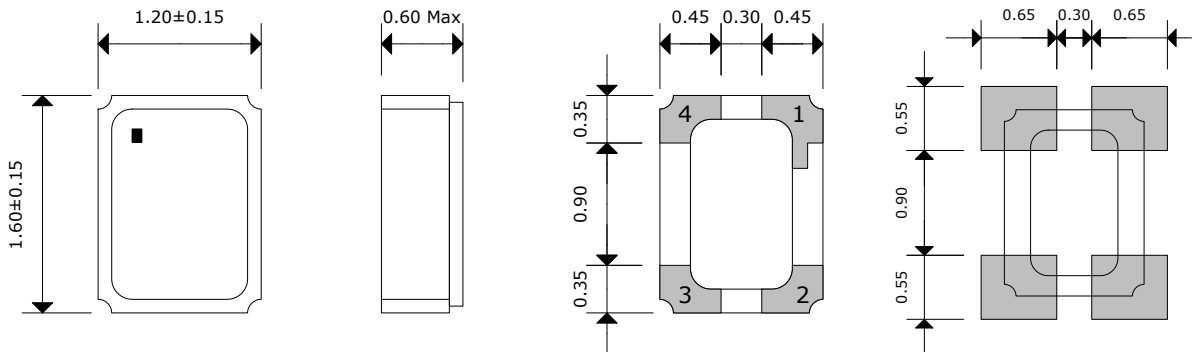

Cage Code: 4GUT4

To customize your parameters contact a Suntsu representative.

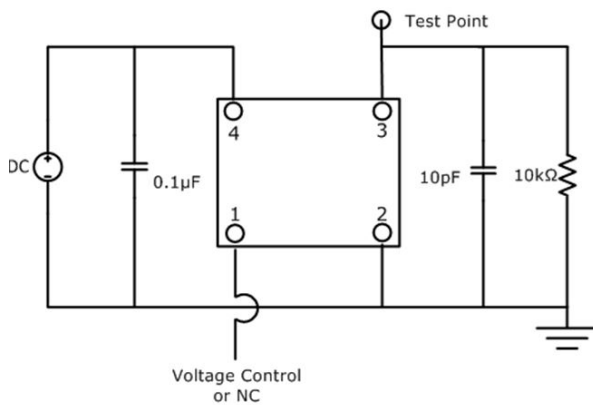
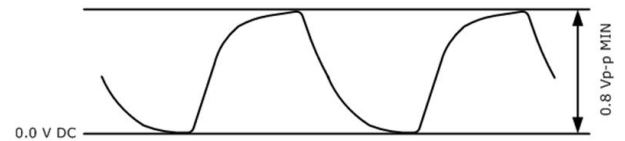
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	26		52	
Frequency Tolerance at +25°C	ppm	-2.0		+2.0	After 2 times reflow
Freq. Stability vs. Op Temp.	ppm	-0.5		+0.5	See part numbering guide for options
Freq. Stability vs. Supply Voltage	ppm	-0.2		+0.2	$\pm 5\%$ change
Freq. Stability vs. Load	ppm	-0.2		+0.2	$\pm 10\%$ change
Freq. Stability vs. Aging	ppm	-1.0		+1.0	1 Year
Operating Temperature	°C	-30		+85	See part numbering guide for options.
Storage Temperature	°C	-40		+85	
Supply Voltage (V _{DD})	V	1.8		3.3	See part numbering guide for options.
Current (I _{DD})	mA			2	
Control Voltage (V _C , VCTCXO)	V	0.1*V _{DD}		0.9*V _{DD}	Center Voltage: V _{DD} *50%.
Pullability (VCTCXO)	ppm	± 7.0		± 16.0	See part numbering guide for options.
Linearity (VCTCXO)	%	-10		+10	
Output Load (Clipped Sinewave)	k Ω /pF			10//10	
Output Logic Levels	V _{P-P}	0.8			
Symmetry (Duty Cycle)	%	40	50	60	
Start-Up Time	ms			5.0	
VC Input Impedance (VCTCXO)	k Ω	500			
Phase Noise (Typical) 1Hz Offset	dBc/Hz		-57		
Phase Noise (Typical) 10Hz Offset	dBc/Hz		-95		
Phase Noise (Typical) 100Hz Offset	dBc/Hz		-120		
Phase Noise (Typical) 1KHz Offset	dBc/Hz		-140		
Phase Noise (Typical) 10KHz Offset	dBc/Hz		-155		

Outline Drawing and Land Pattern

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



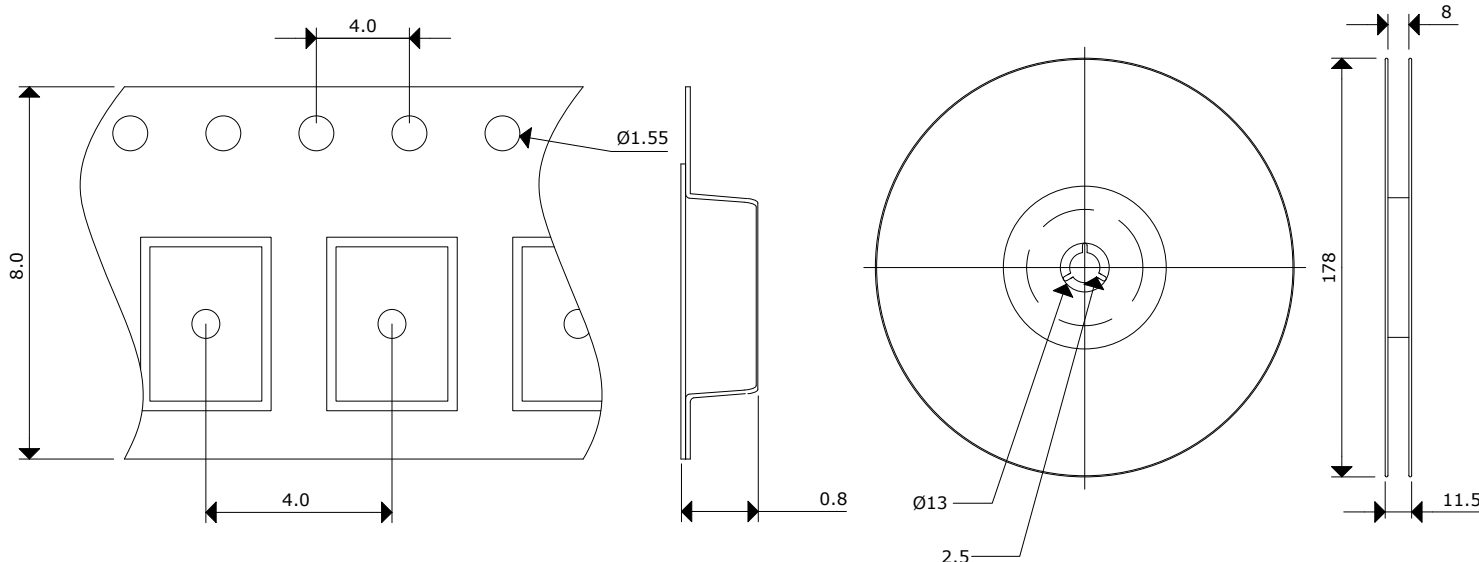
PIN	FUNCTION
1	AFC or GROUND
2	GROUND
3	OUTPUT
4	VDD

Test Circuit (Clipped Sinewave)

Waveform (Clipped Sinewave)

Typical Phase Noise

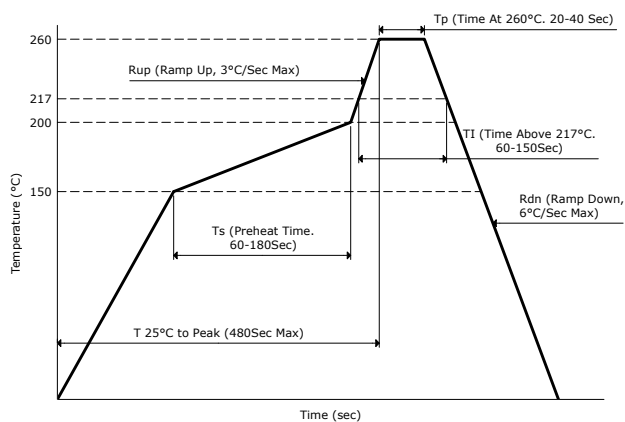

Tape And Reel Dimensions

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

3,000pcs/Reel



Reflow Profile & Part Marking



Frequency In MHz

Line 1 : x x . x x x
Line 2 : S W Y W W

Suntsu —————
Manufacturing Identifier —————
Year ————— Week

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