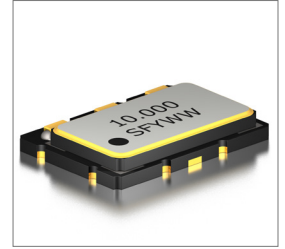


Features
<ul style="list-style-type: none"> Stratum 3 (Overall ± 4.6ppm) CMOS (VC)TCXO Tape and Reel

Applications
<ul style="list-style-type: none"> Base Stations Stratum 3 Small Cell




Part Numbering Guide

SST 75 C 33 S 48 V F - 10.000M

SUNTSU TCXO

7.0mm x 5.0mm

CMOS



Cage Code: 4GUT4
To customize your parameters contact a Suntsu representative.
* Option U is available only for -20°C to +70°C

SUPPLY VOLTAGE
33 : 3.3V $\pm 5\%$
50 : 5.0V $\pm 5\%$

FREQUENCY STABILITY
F : ± 0.50 ppm
S : ± 0.37 ppm
T : ± 0.28 ppm
*U : ± 0.14 ppm

OPERATING TEMPERATURE RANGE
07 : 0°C - +70°C
16 : -10°C - +60°C
27 : -20°C - +70°C
48 : -40°C - +85°C

FREQUENCY
MHz

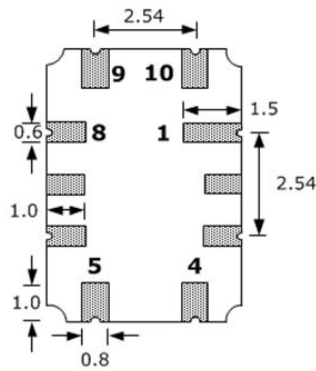
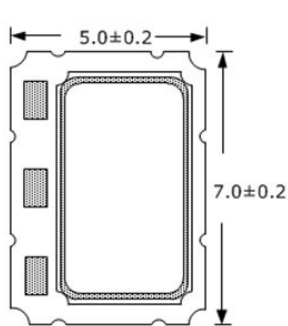
PULLABILITY
BLANK : TCXO
F : ± 8.0 ppm
G : ± 5.0 ppm

TCXO/VCTCXO
BLANK : TCXO
V : VCTCXO

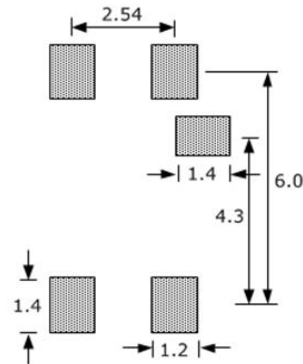
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	5		26	
Frequency Tolerance at +25°C	ppm	-4.6		+4.6	
Freq. Stability vs. Op Temp.	ppm	-0.28		+0.28	See part numbering guide for options.
Holdover Stability	ppm	-0.37		+0.37	
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature	°C	-55		+125	
Supply Voltage (V _{DD}) - 3.3V Option	V	3.135	3.3	3.465	
Supply Voltage (V _{DD}) - 5.0V Option	V	4.750	5.0	5.250	
Current (I _{DD})	mA			6	
Voltage (VC, VCTCXO) - 3.3V Option	V	0.5		2.5	
Voltage (VC, VCTCXO) - 5.0V Option	V	0.5		2.5	
Pullability (VCTCXO)	ppm	± 5.0		± 8.0	See part numbering guide for options.
Linearity (VCTCXO)	%			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			5	
Symmetry (Duty Cycle)	%	45	50	55	
Tri-State Input Voltage (Enabled)	V	0.7*V _{DD}			
Tri-State Input Voltage (Disabled)	V			0.3*V _{DD}	
Start-Up Time	ms			2	
VC Input Impedance (VCTCXO)	k Ω	100			
Phase Noise (Typical) 100Hz Offset	dBc/Hz		-120		
Phase Noise (Typical) 1KHz Offset	dBc/Hz		-140		
Phase Noise (Typical) 10KHz Offset	dBc/Hz		-148		

Outline Drawing & Land Pattern

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

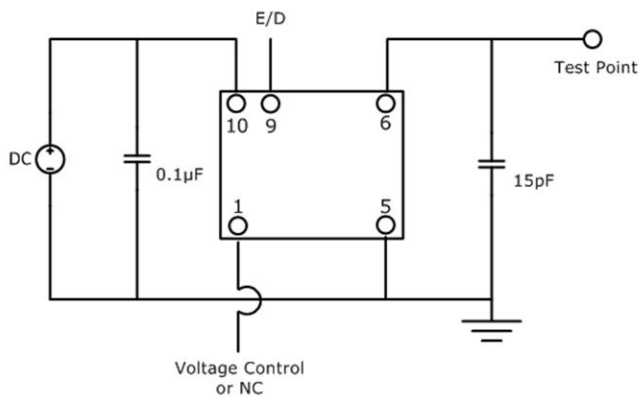


RECOMMENDED LAND PATTERN

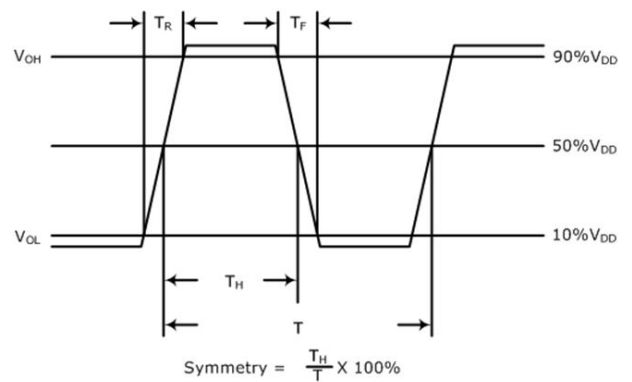


PIN	FUNCTION
1	NC
4	GND
5	OUTPUT
8	TRI-STATE
9	V _{DD}
10	V _C (VCTCXO) or GND (TCXO)

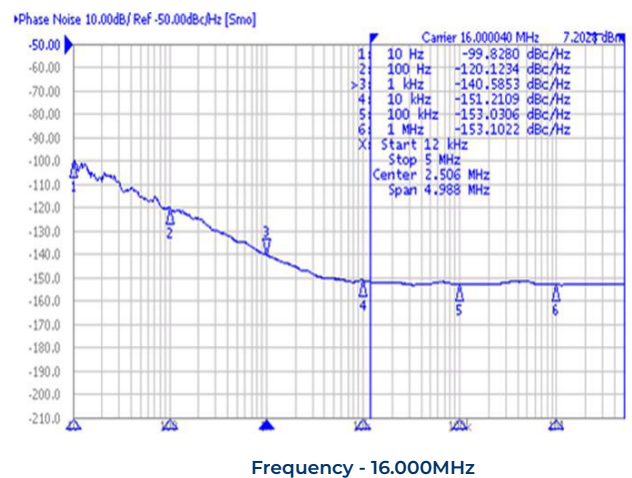
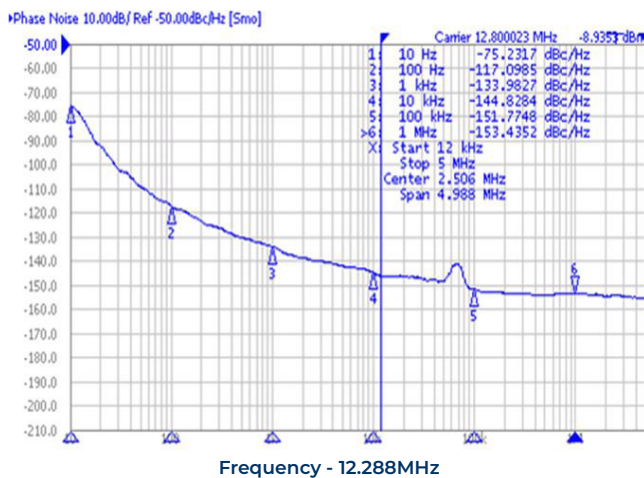
Test Circuit (CMOS)



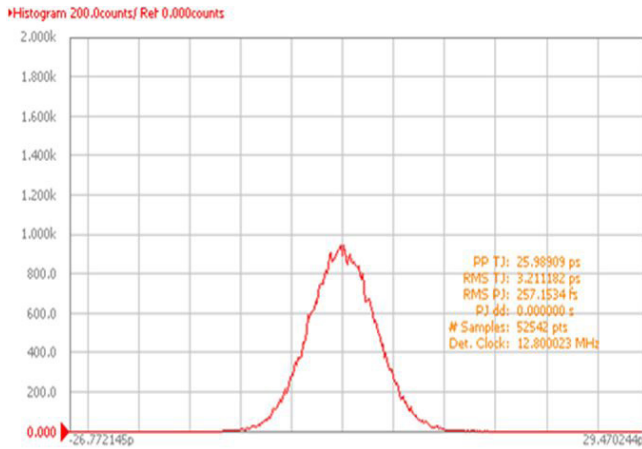
Waveform (CMOS)



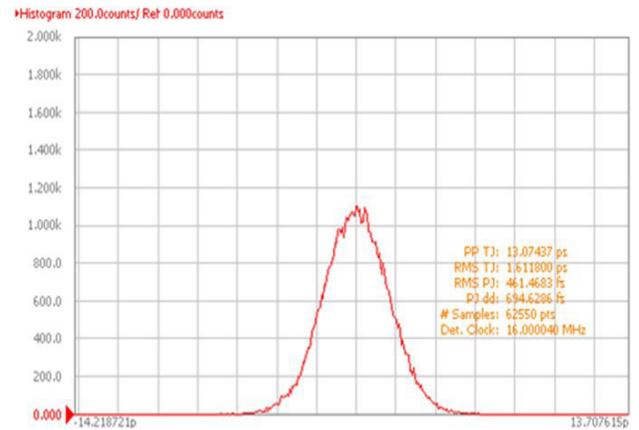
Typical Phase Noise Performance (Measured By Agilent E5052A)



Typical Jitter Performance (Measured By Agilent E5052A)

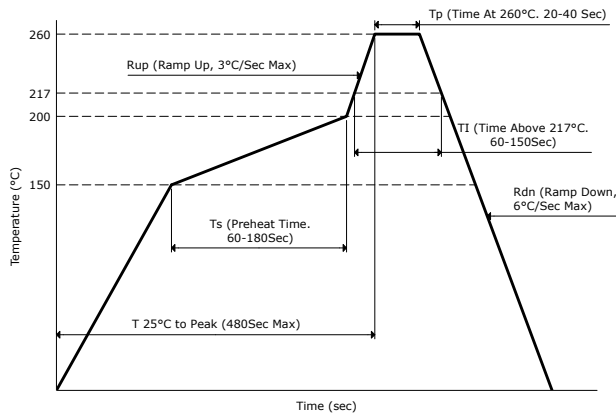


Frequency - 12.288MHz

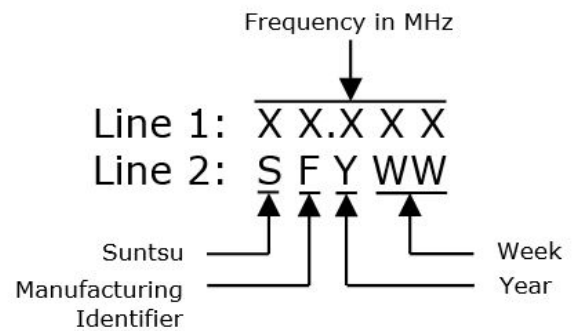


Frequency - 16.000MHz

Reflow Profile



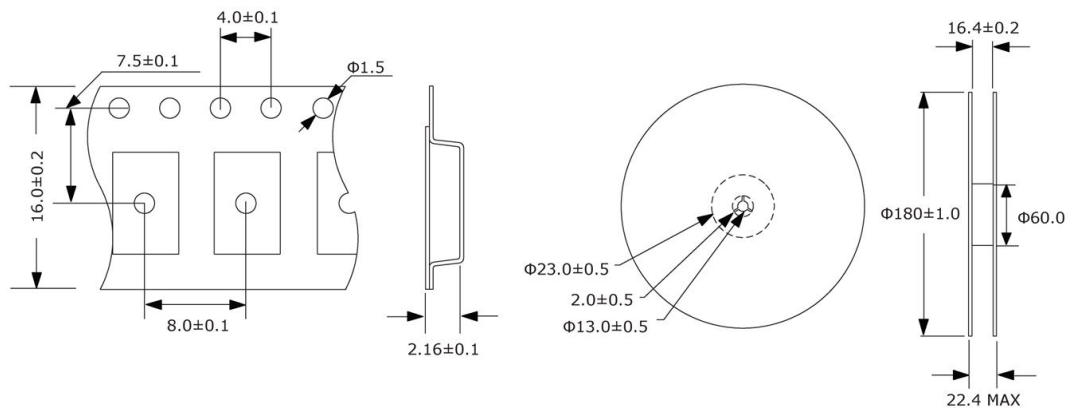
Part Marking



Tape And Reel Dimensions

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

1,000pcs/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