SUNTSU

Ceramic Stratum 3 SMD 10 Pad CMOS (VC)TCXO

SST75C Series

7.0mm x 5.0mm

Features

- Stratum 3 (Overall ±4.6ppm)
- CMOS
- (VC)TCXO
- Tape and Reel

Applications

- 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**
- **SUPPLY VOLTAGE**
  - 33 : 3.3V±5%
  - 50 : 5.0V±5%
- **FREQUENCY STABILITY**
  - F : ±0.50ppm
  - S : ±0.37ppm
  - T : ±0.28ppm
  - *U : ±0.14ppm
- **OPERATING TEMPERATURE RANGE**
  - 07 : 0°C - +70°C
  - 16 : -10°C - +60°C
  - 27 : -20°C - +70°C
  - 48 : -40°C - +85°C
- **TCXO/VCTCXO**
  - BLANK : TCXO
  - V : VCTCXO
- **PULLABILITY**
  - BLANK : TCXO
  - F : ±8.0ppm
  - G : ±5.0ppm
- **FREQUENCY**
  - MHz

RoHS COMPLIANT

Cage Code: 4GUT4

To customize your parameters contact a Suntsu representative.

* Option U is available only for -20°C to +70°C

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	5		26	
Frequency Tolerance overall 20 years	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			10	
VC Input Impedance (VCTCXO)	kΩ	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		

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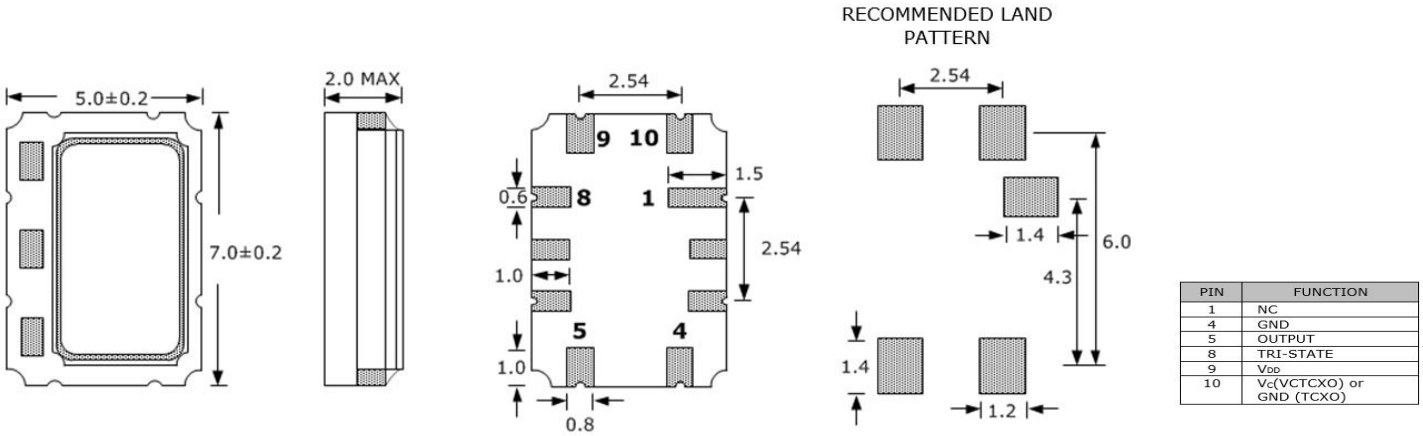
SST75C Series

7.0mm x 5.0mm

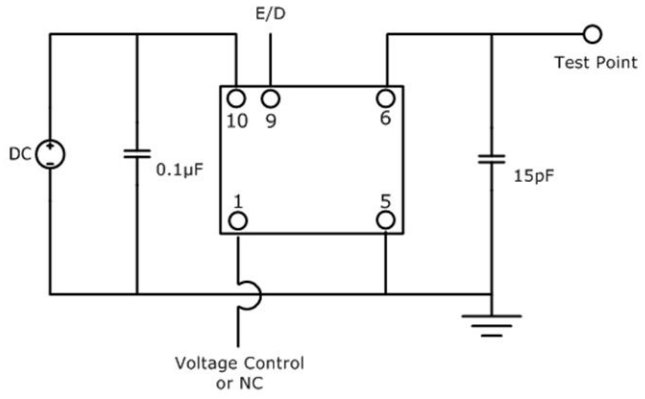
Outline Drawing & Land Pattern

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

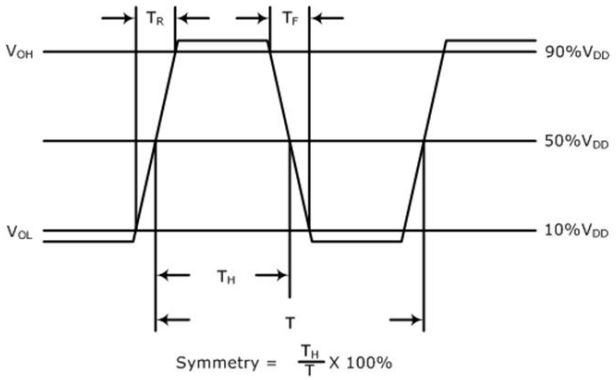


PIN	FUNCTION
1	NC
4	GND
5	OUTPUT
8	TRI-STATE
9	V_{DD}
10	V_C(VCTCXO) or GND (TCXO)

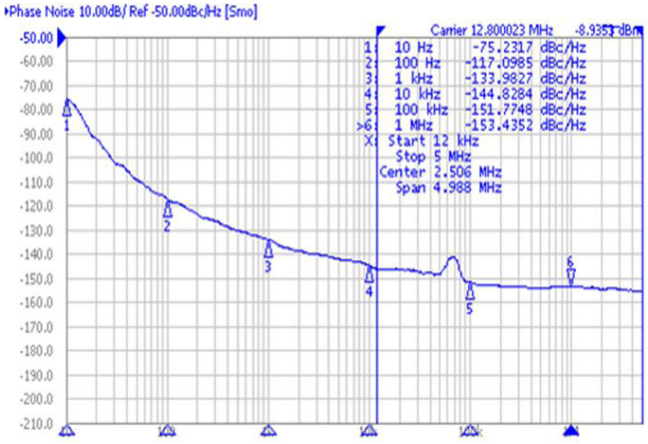
Test Circuit (CMOS)



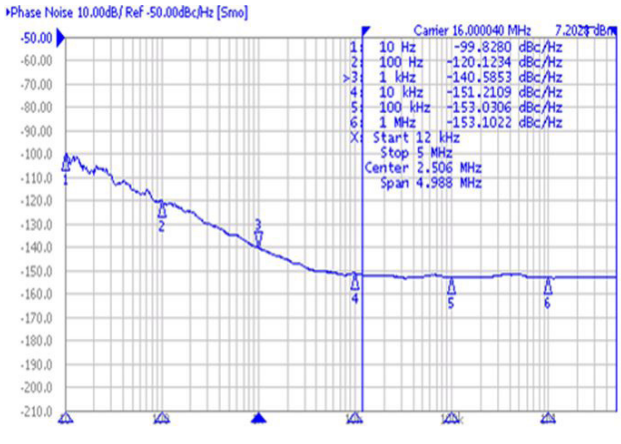
Waveform (CMOS)



Typical Phase Noise Performance (Measured By Agilent E5052A)



Frequency - 12.288MHz



Frequency - 16.000MHz

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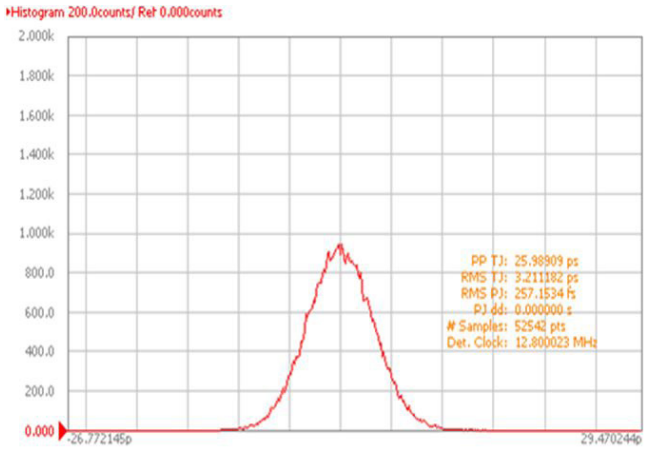
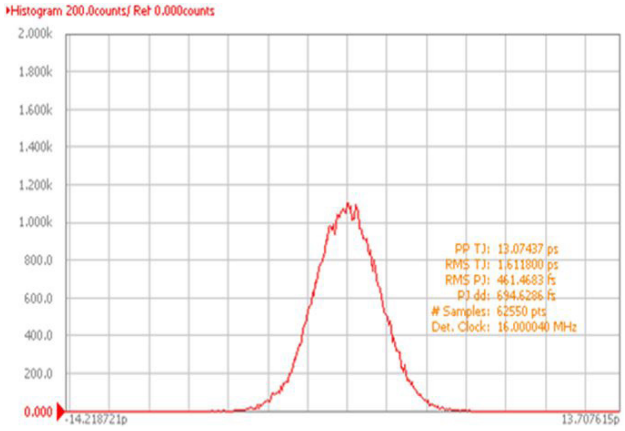
Typical Jitter Performance (Measured By Agilent E5052A)

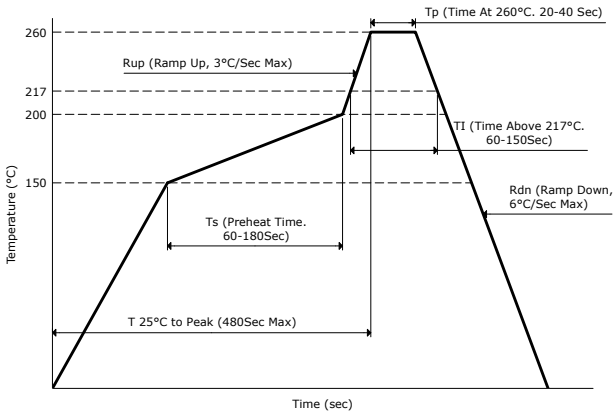


Frequency - 12.288MHz

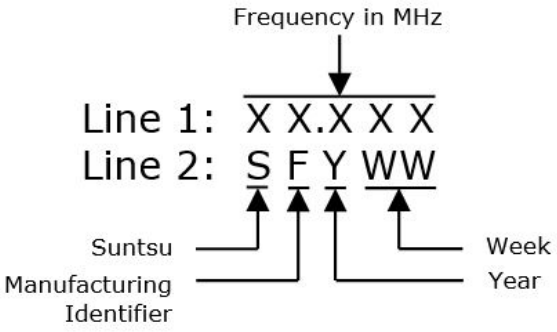


Frequency - 16.000MHz

Reflow Profile



Part Marking



Tape And Reel Dimensions

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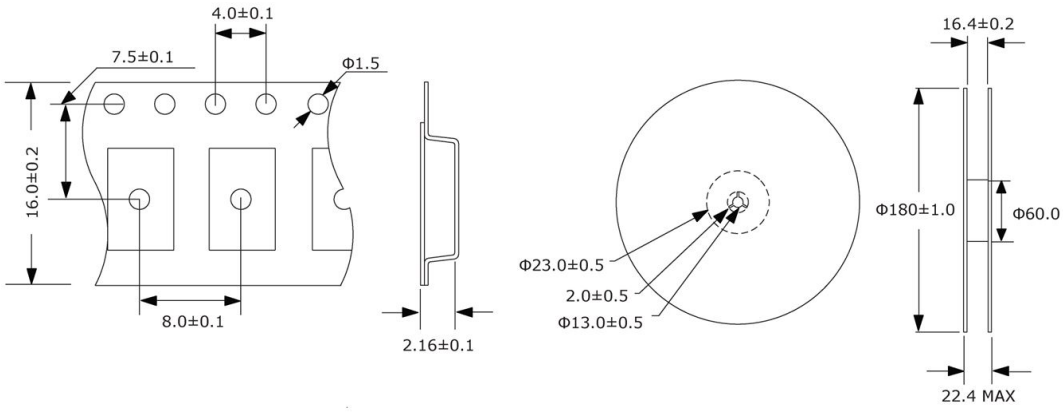
1,000pcs/Reel



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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

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