

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>±0.5ppm (Frequency Stability) Available</li> <li>Clipped Sinewave</li> <li>(VC)TCXO</li> <li>RoHS Compliant</li> <li>Tape and Reel</li> </ul>	<ul style="list-style-type: none"> <li>GPS</li> <li>Mobile Communication Equipment</li> <li>Base Stations</li> <li>WLAN/WiMAX/WiFi</li> </ul>



### PART NUMBERING GUIDE

**SUNTSU TCXO** → **STC 75 K 33 R 48 V E - 16.000M** ← **FREQUENCY (MHz)**

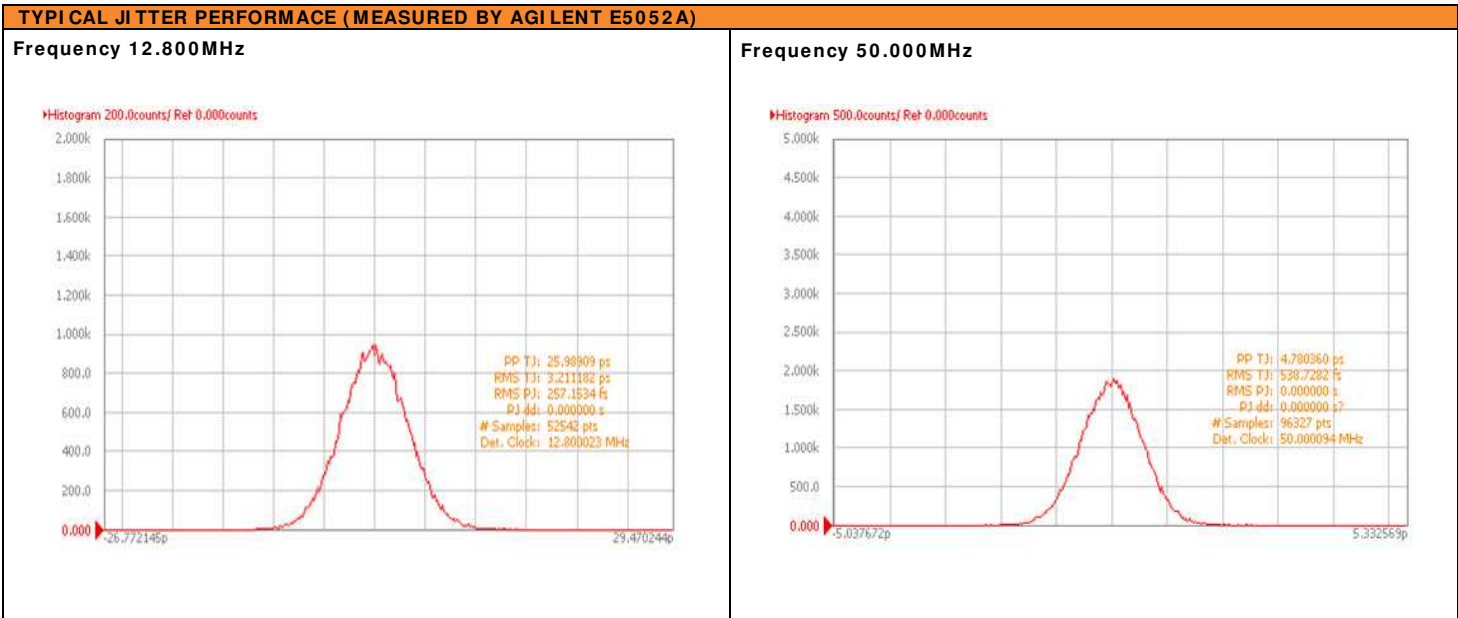
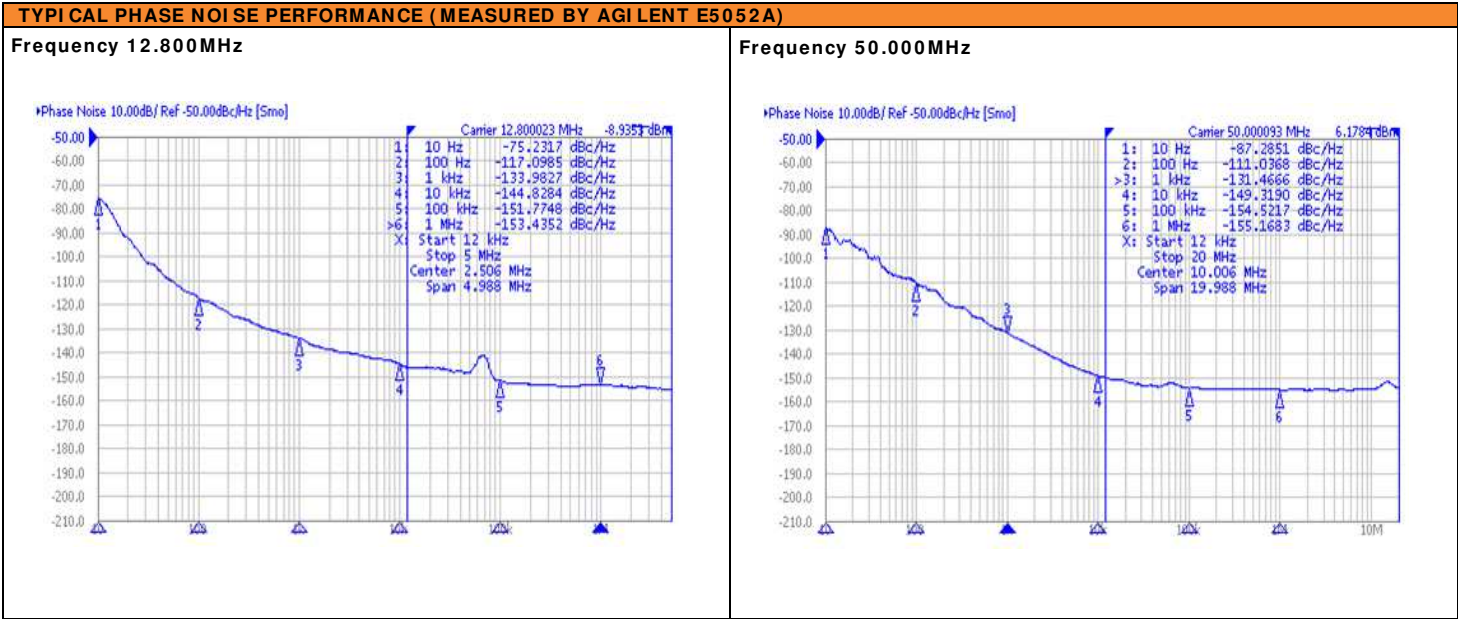
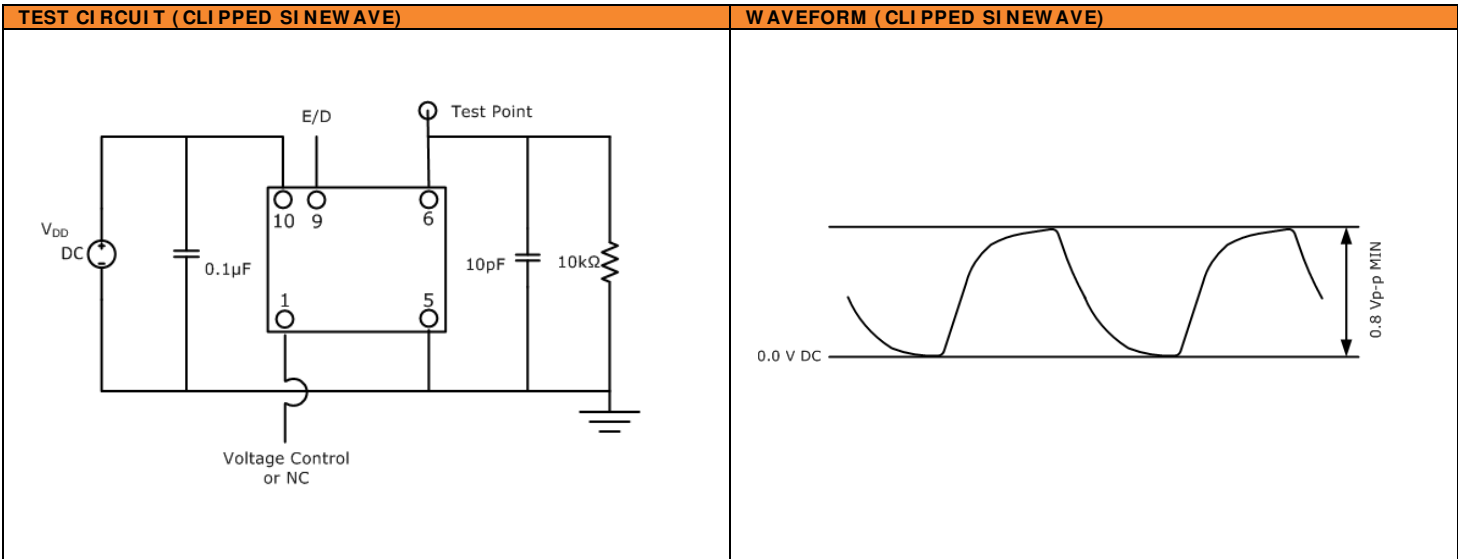
<b>7.0mm x 5.0mm</b>	<b>PULLABILITY</b>
<b>CLIPPED SINEWAVE</b>	BLANK: TCXO
<b>SUPPLY VOLTAGE</b>	E: ±12.0ppm
33: 3.3V±5%	F: ±8.0ppm
50: 5.0V±5%	G: ±5.0ppm
<b>FREQUENCY STABILITY</b>	<b>TCXO/ VCTCXO</b>
N: ±5.0ppm	BLANK: TCXO
O: ±2.5ppm	V: VCTCXO
P: ±2.0ppm	<b>OPERATING TEMPERATURE RANGE</b>
Q: ±1.5ppm	07: 0°C to +70°C
R: ±1.0ppm	16: -10°C to +60°C
F: ±0.5ppm	17: -10°C to +70°C
	27: -20°C to +70°C
	38: -30°C to +85°C
	48: -40°C to +85°C

Cage Code: 4GUT4  
To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range	MHz	5		40	
Frequency Tolerance at +25°C		-2		+2	1 hour after reflow.
Frequency Stability vs. Operating Temperature (Ref. 25°C)		-1.0		1.0	See part numbering guide for options.
vs. Supply Voltage	ppm	-0.5		0.5	V <sub>DD</sub> ±5% change.
vs. Load		-0.2		0.2	±10% change.
vs. Aging		-1.0		1.0	1 year.
Operating Temperature	°C	-40		+85	See part numbering guide for options.
Storage Temperature		-55		+125	
Supply Voltage (V <sub>DD</sub> )	V	3.135	3.3	3.465	See part numbering guide for options.
Current (I <sub>DD</sub> )	mA			2	For 3.3V and 5.0V.
Control Voltage (V <sub>C</sub> , VCTCXO)	V	0		V <sub>DD</sub>	Center Voltage: 0.5* V <sub>DD</sub> .
Pullability (VCTCXO)	ppm	±5.0		±12.0	See part numbering guide for options.
Linearity (VCTCXO)	%			10	
Output Load (Clipped Sinewave)	kΩ//pF			10//10	
Output Logic Levels	V <sub>p-p</sub>	0.8			
Symmetry (Duty Cycle)	%	40	50	60	
Tri-State Input Voltage	V	0.7*V <sub>DD</sub>		0.3*V <sub>DD</sub>	No Connection.
Start-Up Time	ms			2	
VC Input Impedance (VCTCXO)	kΩ	100			
Phase Noise (Typical)	100Hz Offset		-120		
	1kHz Offset		-140		
	10kHz Offset		-148		

### OUTLINE DRAWING

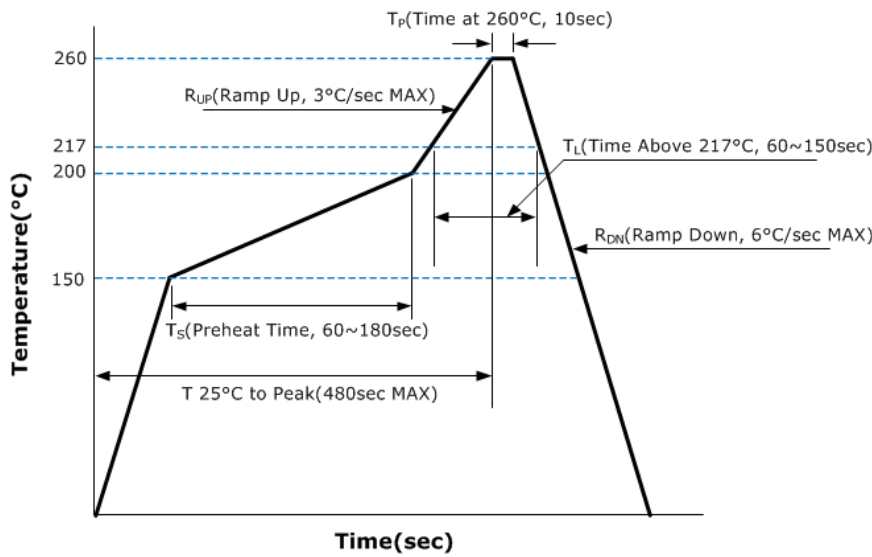
PIN	FUNCTION
1	NC
4	GND
5	OUTPUT
8	TRI-STATE
9	V <sub>DD</sub>
10	V <sub>C</sub> (VCTCXO) or GND (TCXO)



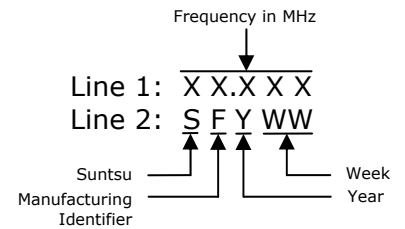
### ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

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
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003

### REFLOW PROFILE

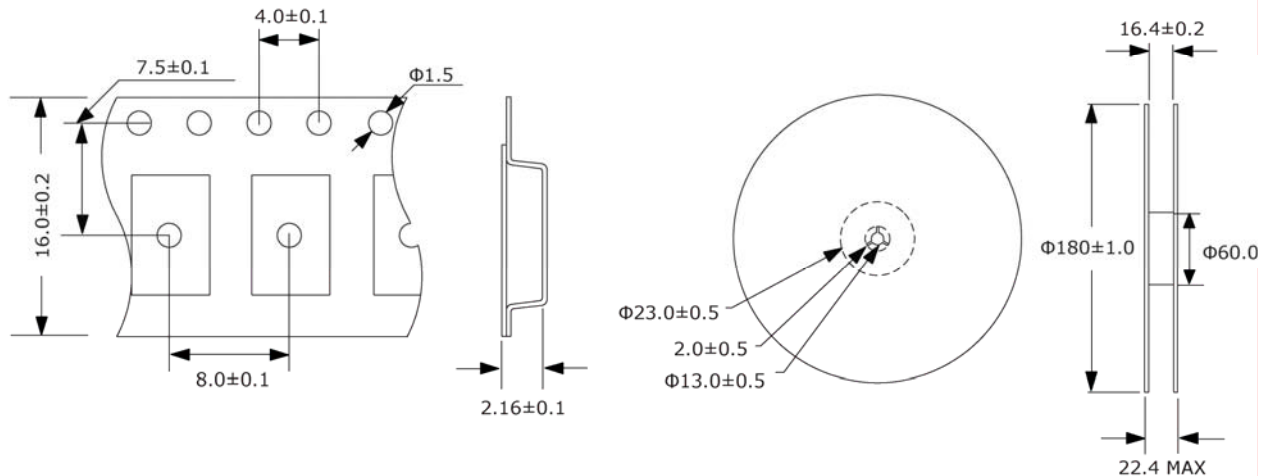


### MARKING



### TAPE AND REEL DIMENSIONS

1,000pcs/reel



NOTE: Dimensions in millimeters (mm); drawing is not to scale.