

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>- Stratum 3 (Overall <math>\pm 4.6</math>ppm )</li> <li>- Clipped Sinewave</li> <li>- (VC)TCXO</li> <li>- RoHS Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Base Stations</li> <li>- Stratum 3</li> </ul>



### PART NUMBERING GUIDE

**SUNTSU STRATUM 3 TCXO** → **SST FS K 33 R 48 V E- 10.000M** ← **FREQUENCY (MHz)**

**FULL SIZE** → FS

**CLIPPED SINEWAVE** → K

**SUPPLY VOLTAGE**  
 3: 3.3V $\pm$ 5%  
 5: 5.0V $\pm$ 5% → 33

**FREQUENCY STABILITY**  
 R:  $\pm 1.0$ ppm → R

**PULLABILITY**  
 BLANK: TCXO  
 E:  $\pm 12.0$ ppm  
 F:  $\pm 8.0$ ppm  
 G:  $\pm 5.0$ ppm  
**TCXO/ VCTCXO**  
 BLANK: TCXO  
 V: VCTCXO → V

**OPERATING TEMPERATURE RANGE**  
 27: -20°C to + 70°C  
 48: -40°C to + 85°C → 48

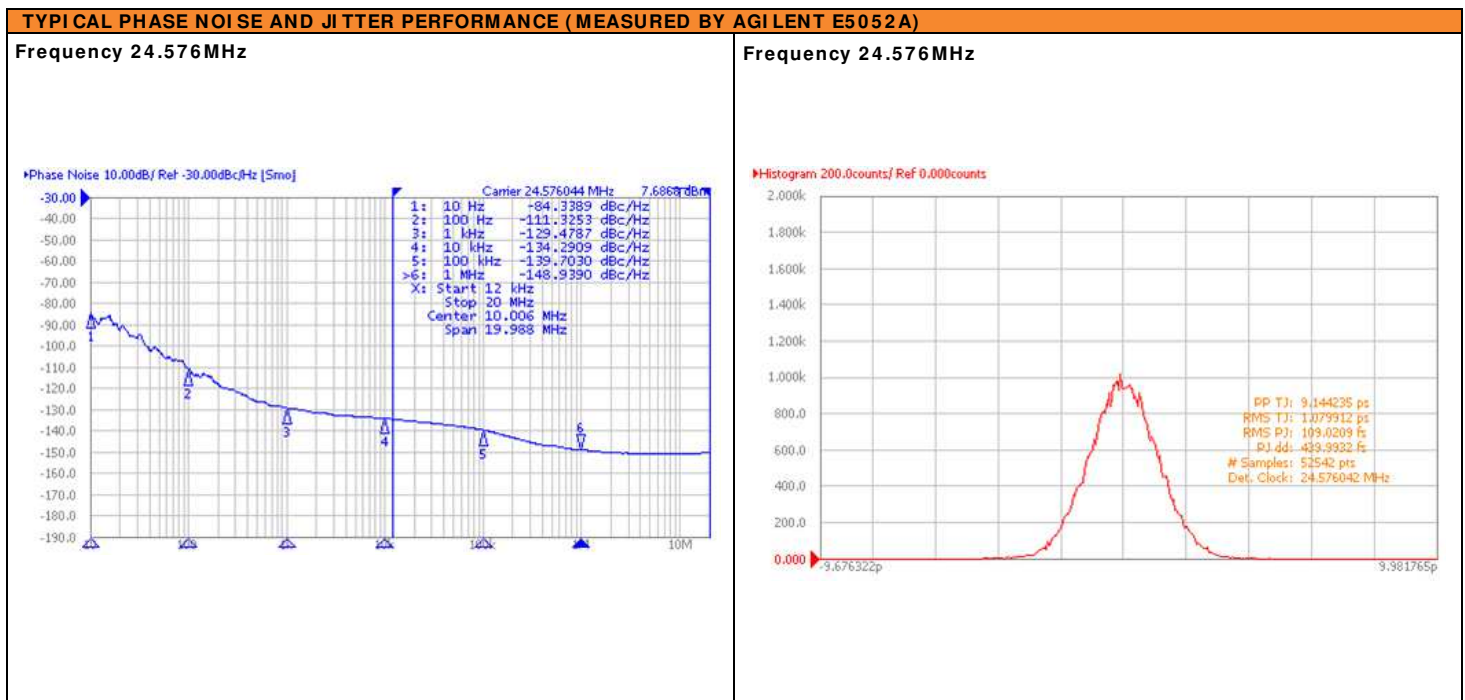
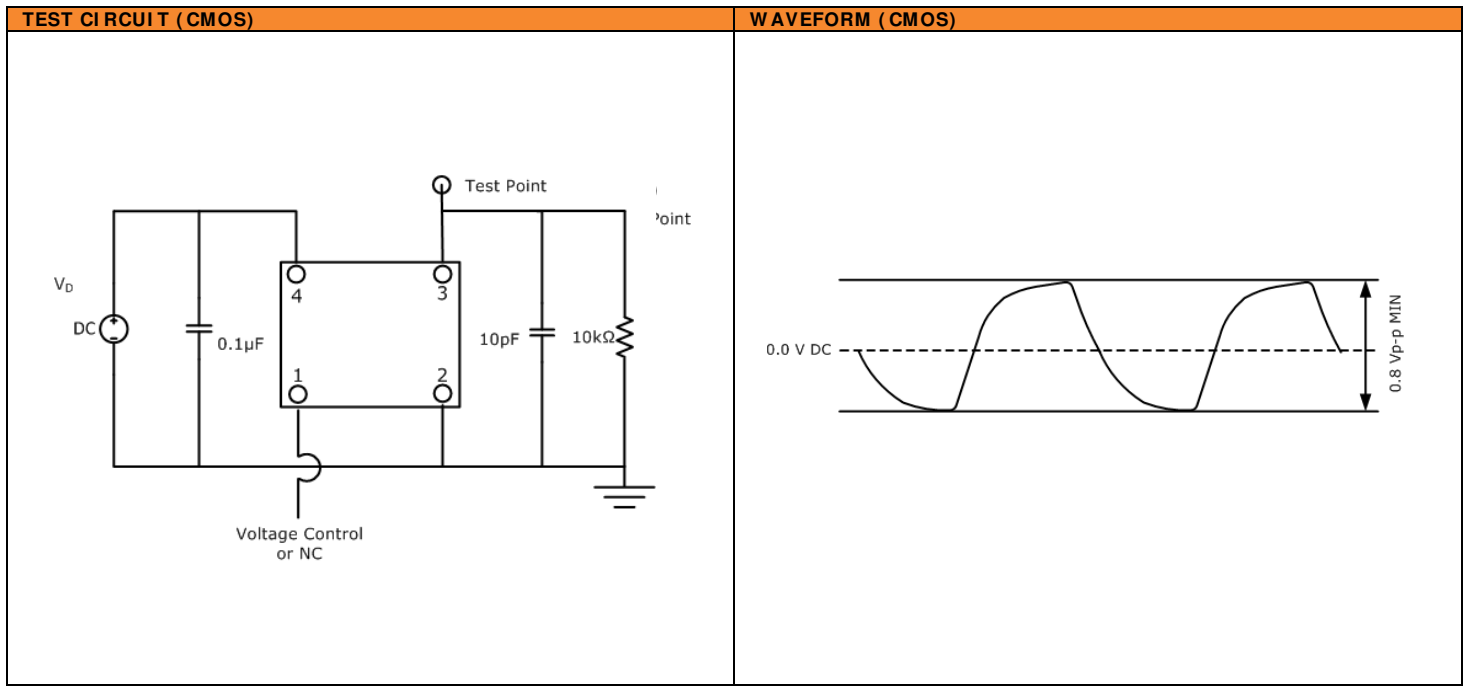
Cage Code: 4GUT4  
 To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	2		40	
Frequency Tolerance at +25°C			-0.3		+0.3	
Frequency Stability vs. Operating Temperature (Ref. 25°C)			-1.0		1.0	
vs. Supply Voltage		ppm	-0.1		0.1	$V_{DD} \pm 5\%$ change.
vs. Load			-0.1		0.1	$\pm 5\%$ change.
vs. Aging			-1.0		1.0	1 year, $\pm 3.1$ ppm for 10years.
Operating Temperature		°C	-40		+85	See part numbering guide for options.
Storage Temperature			-55		+125	
Supply Voltage ( $V_{DD}$ )	3.3V Option	V	3.135	3.3	3.465	
	5.0V Option		4.750	5.0	5.250	
Current ( $I_{DD}$ )		mA			20	
Control Voltage ( $V_C$ , VCTCXO)	3.3V Option	V	0.3		3.0	
	5.0V Option		0.5		4.5	
Pullability (VCTCXO)		ppm	$\pm 5.0$		$\pm 12.0$	See part numbering guide for options.
Linearity (VCTCXO)		%			20	
Output Load (Clipped Sinewave)		k $\Omega$ //pF			10//10	
Output Logic Levels		$V_{P-P}$	0.8			
Rise ( $T_R$ ) and Fall ( $T_F$ ) Time		ns			10	
Symmetry (Duty Cycle)		%	40	50	60	
Start-Up Time		ms			3	
Frequency Adjustment		ppm	3			
Phase Noise (Typical)	10Hz Offset	dBc/Hz		-80		
	100Hz Offset			-120		
	1kHz Offset			-135		
	10kHz Offset			-140		
	100kHz Offset			-145		

### OUTLINE DRAWING

NOTE: Dimensions in millimeters (mm).

PIN	FUNCTION
1	$V_C$ (VCTCXO) or NC (TCXO)
2	GND
3	OUTPUT
4	$V_{DD}$



ENVIRONMENTAL & MECHANICAL SPECIFICATIONS		MARKING
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	<p>Frequency in MHz</p> <p>Line 1: X X . X X X</p> <p>Line 2: S F Y W W</p> <p>Suntsu Manufacturing Identifier      Week Year</p>
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	