

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>- ±1.0ppm (Frequency Stability) Available</li> <li>- Clipped Sinewave</li> <li>- (VC)TCXO</li> <li>- RoHS Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Communication equipment</li> <li>- Base Station</li> <li>- FAX</li> </ul>



**PART NUMBERING GUIDE**

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

<p><b>FULL SIZE</b></p> <p><b>CLIPPED SINEWAVE</b></p> <p><b>SUPPLY VOLTAGE</b> 33: 3.3V±5% 50: 5.0V±5%</p> <p><b>FREQUENCY STABILITY</b> N: ±5.0ppm O: ±2.5ppm P: ±2.0ppm Q: ±1.5ppm R: ±1.0ppm</p>	<p><b>PULLABILITY</b> BLANK: TCXO D: ±20.0ppm E: ±12.0ppm G: ±5.0ppm</p> <p><b>TCXO/ VCTCXO</b> BLANK: TCXO V: VCTCXO</p> <p><b>OPERATING TEMPERATURE RANGE</b> 07: 0°C to + 70°C 16: -10°C to + 60°C 17: -10°C to + 70°C 27: -20°C to + 70°C 37: -30°C to + 75°C 38: -30°C to + 85°C 48: -40°C to + 85°C</p>
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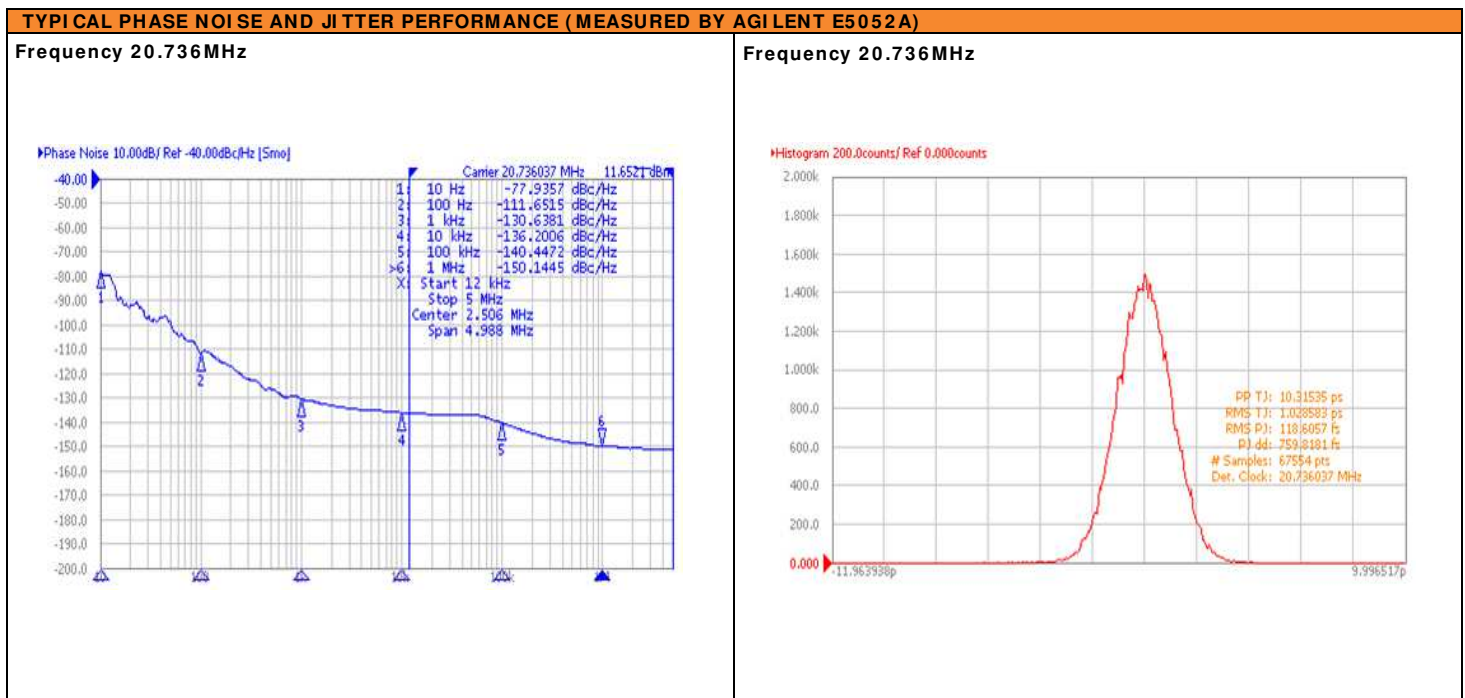
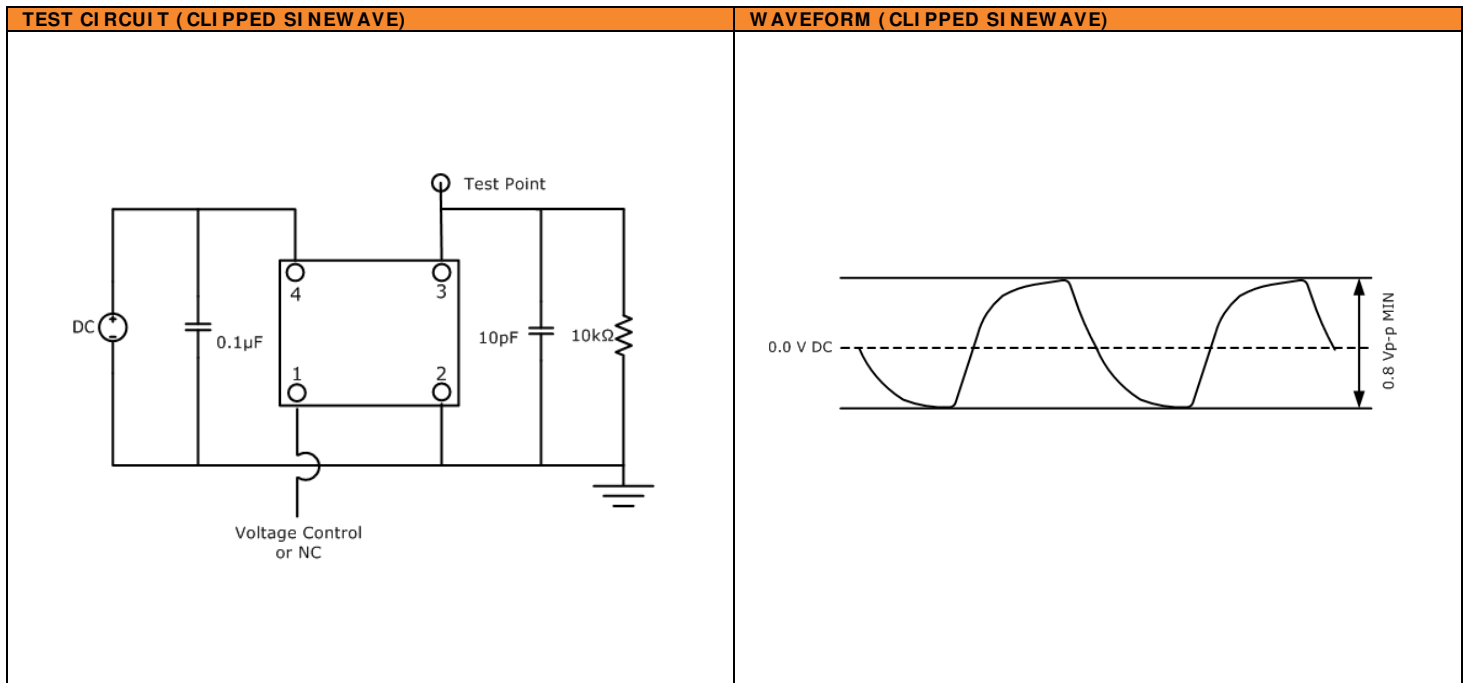
Cage Code: 4GUT4  
To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	6.0		200	
Frequency Tolerance at +25°C			-1.5		+1.5	
Frequency Stability vs. Operating Temperature (Ref. 25°C)			-1.0		1.0	See part numbering guide for options.
vs. Supply Voltage		ppm	-0.3		0.3	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> )	3.3V Option	V	3.135	3.3	3.465	
	5.0V Option		4.750	5.0	5.250	
Current (I <sub>DD</sub> )		mA			50	
Control Voltage (V <sub>C</sub> , VCTCXO)	3.3V Option	V	0.3		3.0	
	5.0V Option		0.5		4.5	
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	
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**

PIN	FUNCTION
1	V <sub>C</sub> (VCTCXO) or N/C (TCXO)
2	GND
3	OUTPUT
4	V <sub>DD</sub>

NOTE: Dimensions in millimeters (mm).



ENVIRONMENTAL & MECHANICAL SPECIFICATIONS	MARKING
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

Frequency in MHz

Line 1: X X . X X X

Line 2: S F Y W W

Suntsu Manufacturing Identifier      Week Year