

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - Stratum 3 (Overall ± 4.6ppm) - CMOS - (VC)TCXO - RoHS Compliant 	<ul style="list-style-type: none"> - Base Stations - Stratum 3



PART NUMBERING GUIDE

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

- FULL SIZE** (S)
- CMOS** (F)
- SUPPLY VOLTAGE** (C): 3: 3.3V \pm 5%, 5: 5.0V \pm 5%
- FREQUENCY STABILITY** (33): R: ± 1.0 ppm
- PULLABILITY** (R): BLANK: TCXO, E: ± 12.0 ppm, F: ± 8.0 ppm, G: ± 5.0 ppm
- TCXO/ VCTCXO** (V): BLANK: TCXO, V: VCTCXO
- OPERATING TEMPERATURE RANGE** (E-): 27: -20°C to + 70°C, 48: -40°C to + 85°C

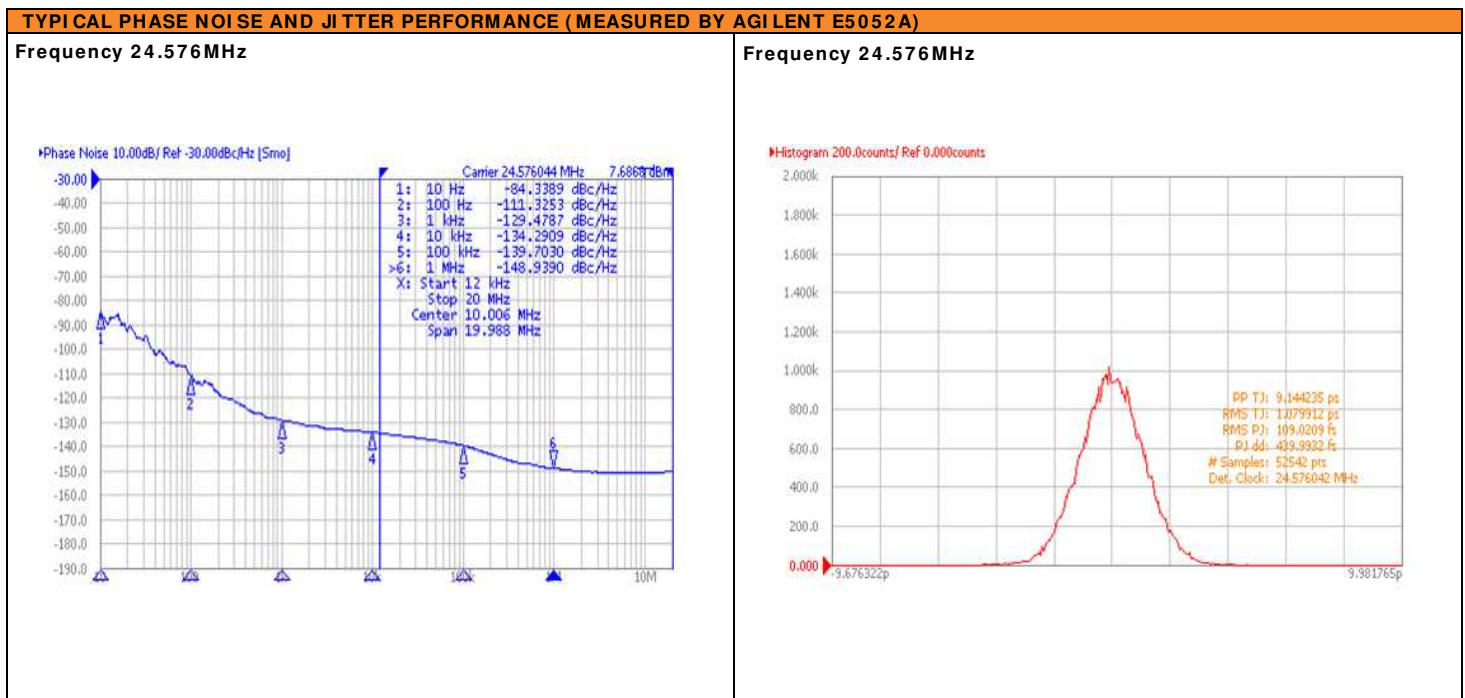
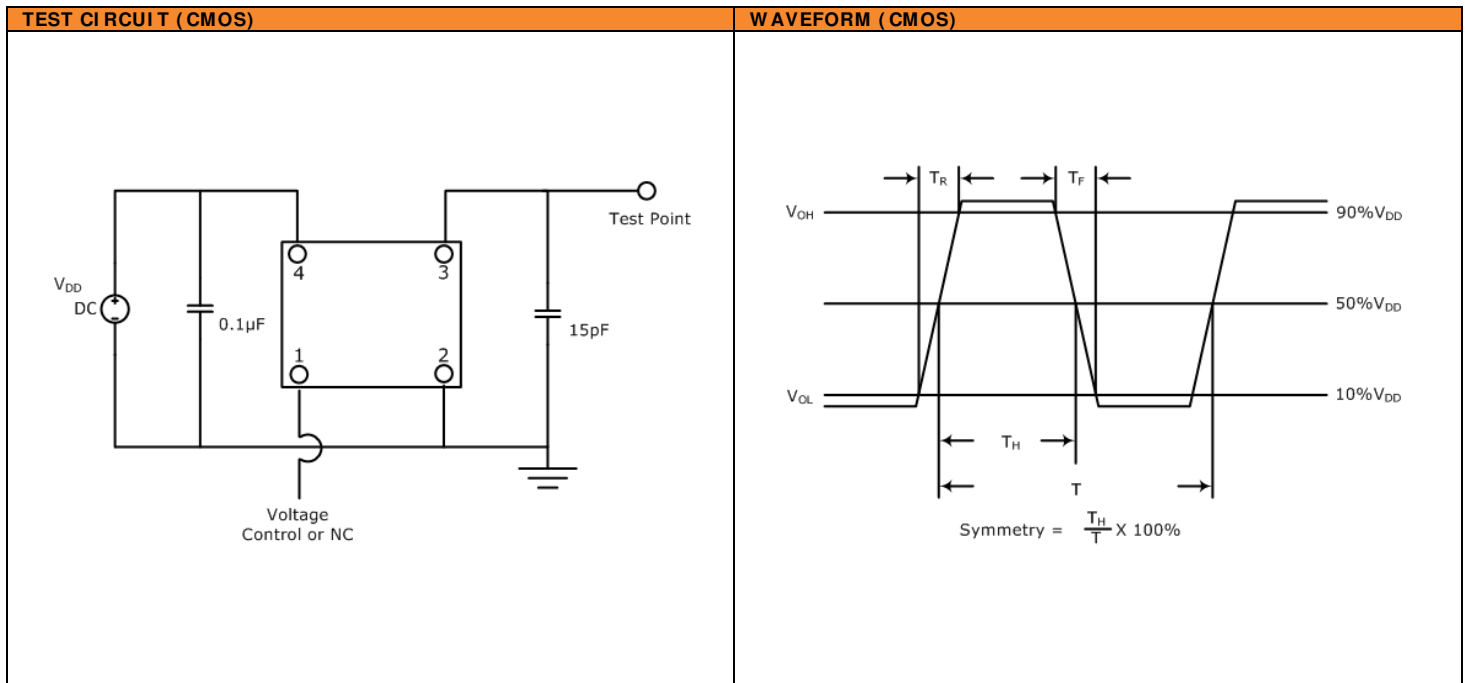
Cage Code: 4GUT4
To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	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, ± 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	± 5.0		± 12.0	See part numbering guide for options.
Linearity (VCTCXO)		%			20	
Output Load (CMOS)		pF			15	
Output Logic Levels	Output Logic High (V _{OH})	V	0.9 * V _{DD}			
	Output Logic Low (V _{OL})				0.1 * V _{DD}	
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	