

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



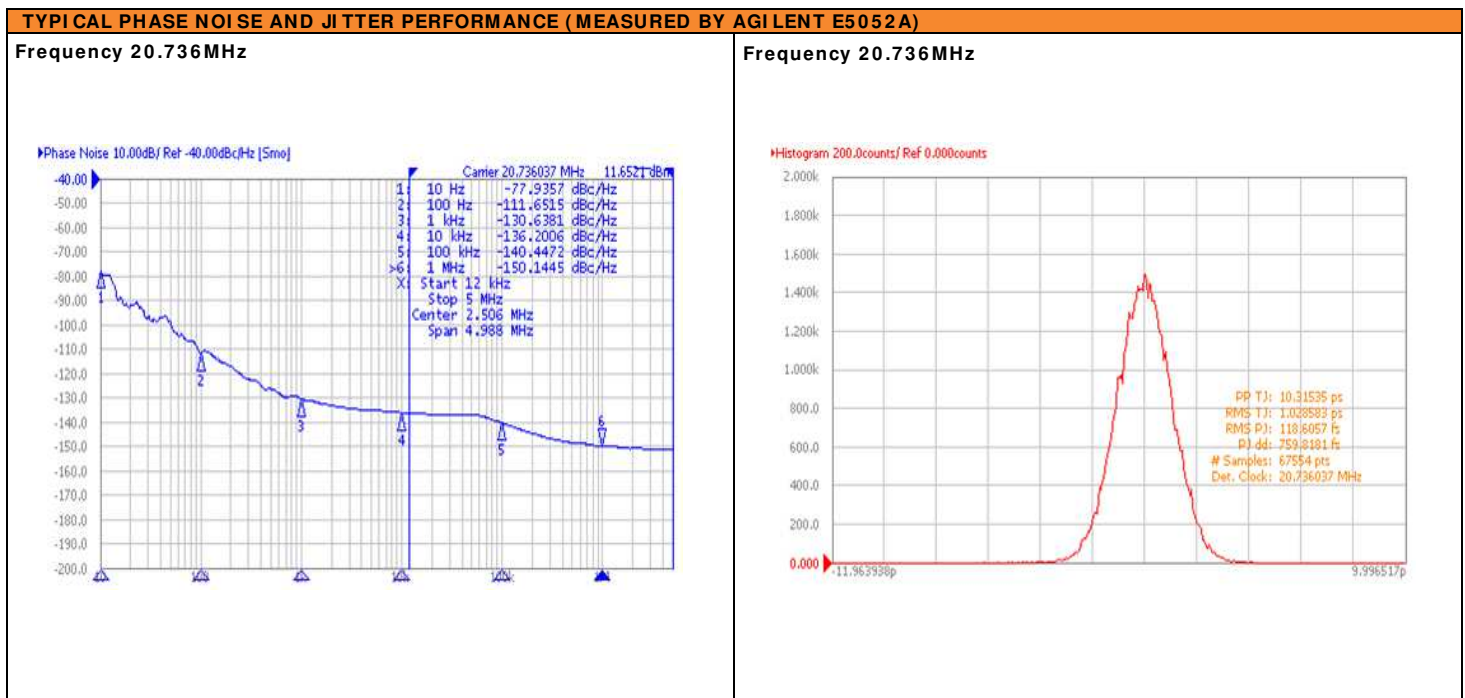
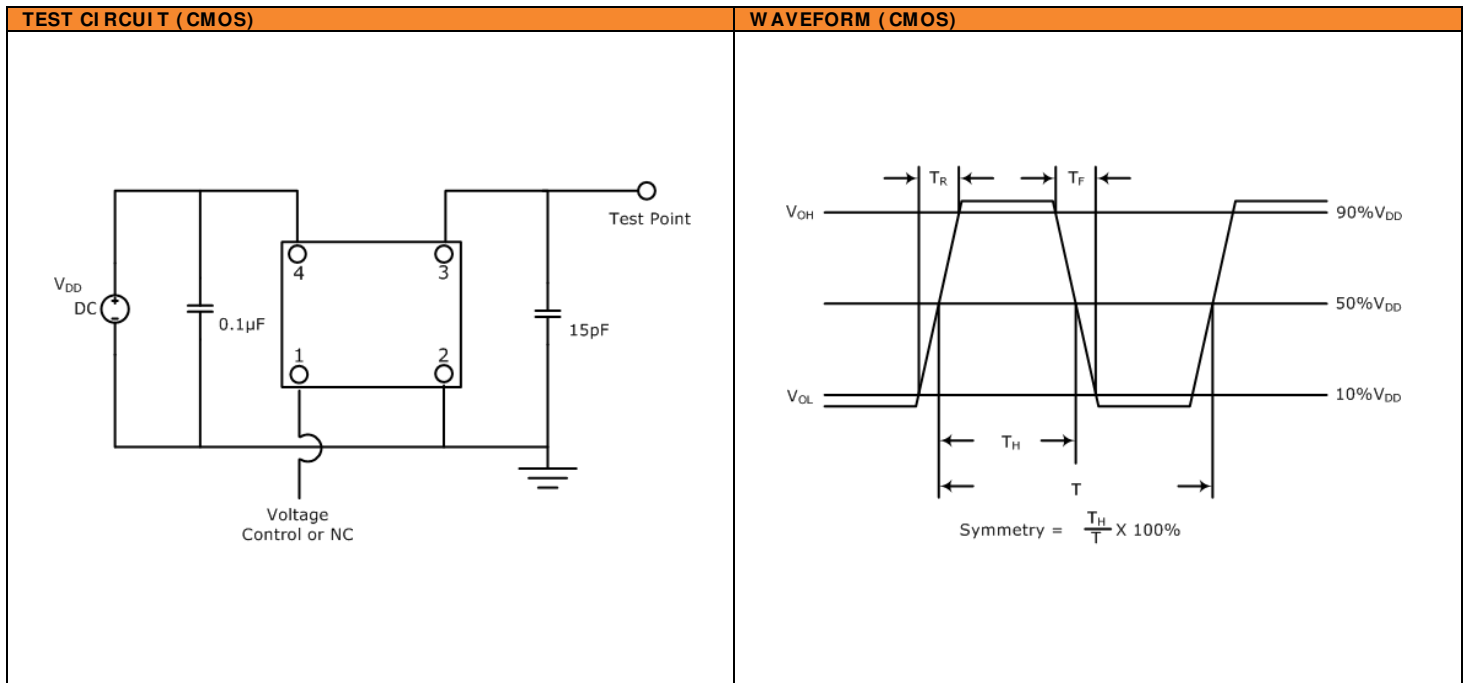
PART NUMBERING GUIDE	
<p>SUNTSU TCXO → STC FS C 33 R 48 V E- 10.000M ← FREQUENCY (MHz)</p> <p>FULL SIZE →</p> <p>CMOS →</p> <p>SUPPLY VOLTAGE 33: 3.3V±5% 50: 5.0V±5%</p> <p>FREQUENCY STABILITY N: ±5.0ppm O: ±2.5ppm P: ±2.0ppm Q: ±1.5ppm R: ±1.0ppm</p>	<p>PULLABILITY BLANK: TCXO D: ±20.0ppm E: ±12.0ppm G: ±5.0ppm</p> <p>TCXO/ VCTCXO BLANK: TCXO V: VCTCXO</p> <p>OPERATING TEMPERATURE RANGE 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>

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

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	1		250	~160MHz at 5.0V
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 _{DD} ±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 _{DD})	3.3V Option	V	3.135	3.3	3.465	
	5.0V Option		4.750	5.0	5.250	
Current (I _{DD})		mA			50	
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)		%			10	
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			5	
Symmetry (Duty Cycle)		%	45	50	55	
Start-Up Time		ms			3	
Frequency Adjustment		ppm	-3		+3	
Phase Noise (Typical)	10Hz Offset	dBc/Hz			-80	
	100Hz Offset				-120	
	1kHz Offset				-135	
	10kHz Offset				-140	
	100kHz Offset				-145	

OUTLINE DRAWING											
<table border="1"> <thead> <tr> <th>PIN</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>V_C(VCTCXO) or NC (TCXO)</td> </tr> <tr> <td>2</td> <td>GND</td> </tr> <tr> <td>3</td> <td>OUTPUT</td> </tr> <tr> <td>4</td> <td>V_{DD}</td> </tr> </tbody> </table>		PIN	FUNCTION	1	V _C (VCTCXO) or NC (TCXO)	2	GND	3	OUTPUT	4	V _{DD}
PIN	FUNCTION										
1	V _C (VCTCXO) or NC (TCXO)										
2	GND										
3	OUTPUT										
4	V _{DD}										

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