

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - ±50ppb (Frequency Stability) Available - Sinewave - OCXO - RoHS Compliant 	<ul style="list-style-type: none"> - Military Communication equipment - Base Stations - Test Equipment - Synthesizers - Digital Switching



PART NUMBERING GUIDE

SUNTSU OCXO → **SOC FS S 12 K 27 - 10.000M** ← **FREQUENCY (MHz)**

FULL SIZE → SOC

SINEWAVE → FS

SUPPLY VOLTAGE → S

03: 3.3V±5%
05: 5.0V±5%
09: 9.0V±5%
12: 12.0V±5%

FREQUENCY STABILITY → 12

F: ±500ppb
I: ±200ppb
J: ±100ppb
K: ±50ppb

OPERATING TEMPERATURE RANGE → 27

05: 0°C to + 50°C
16: -10°C to + 60°C
27: -20°C to + 70°C
48: -40°C to + 85°C

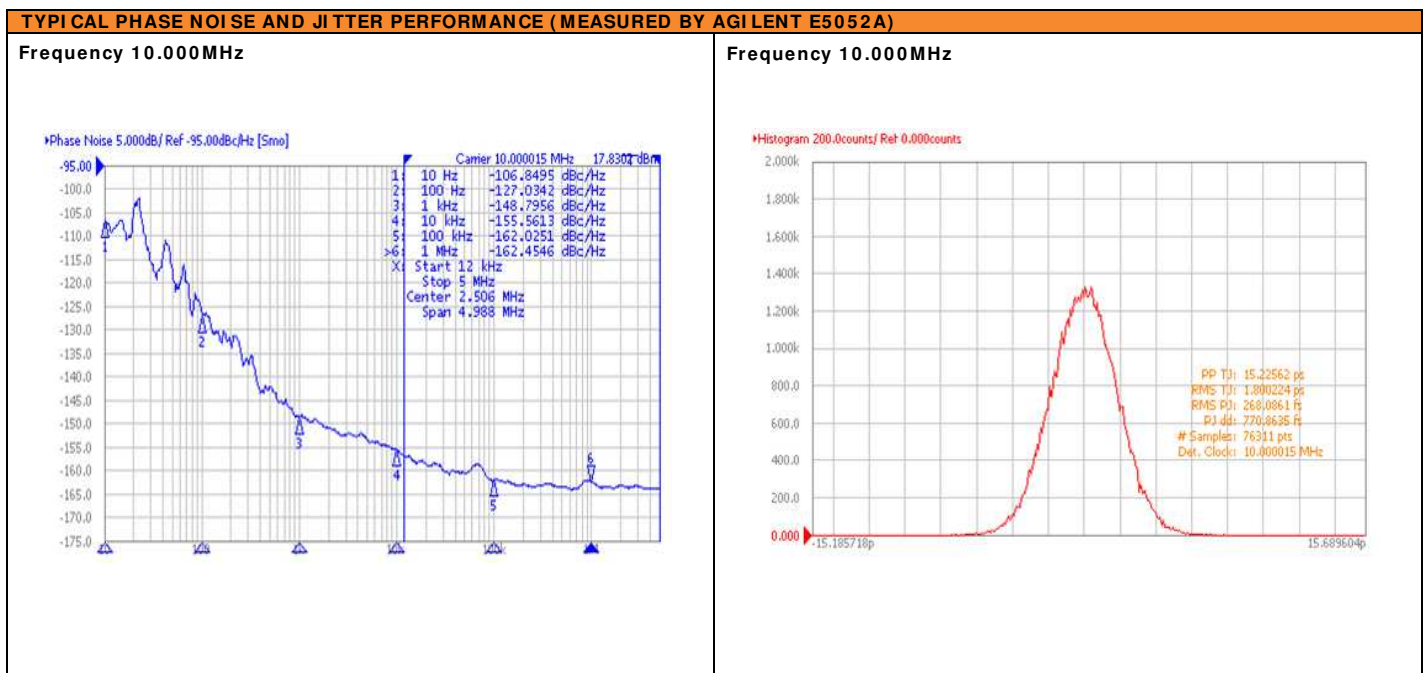
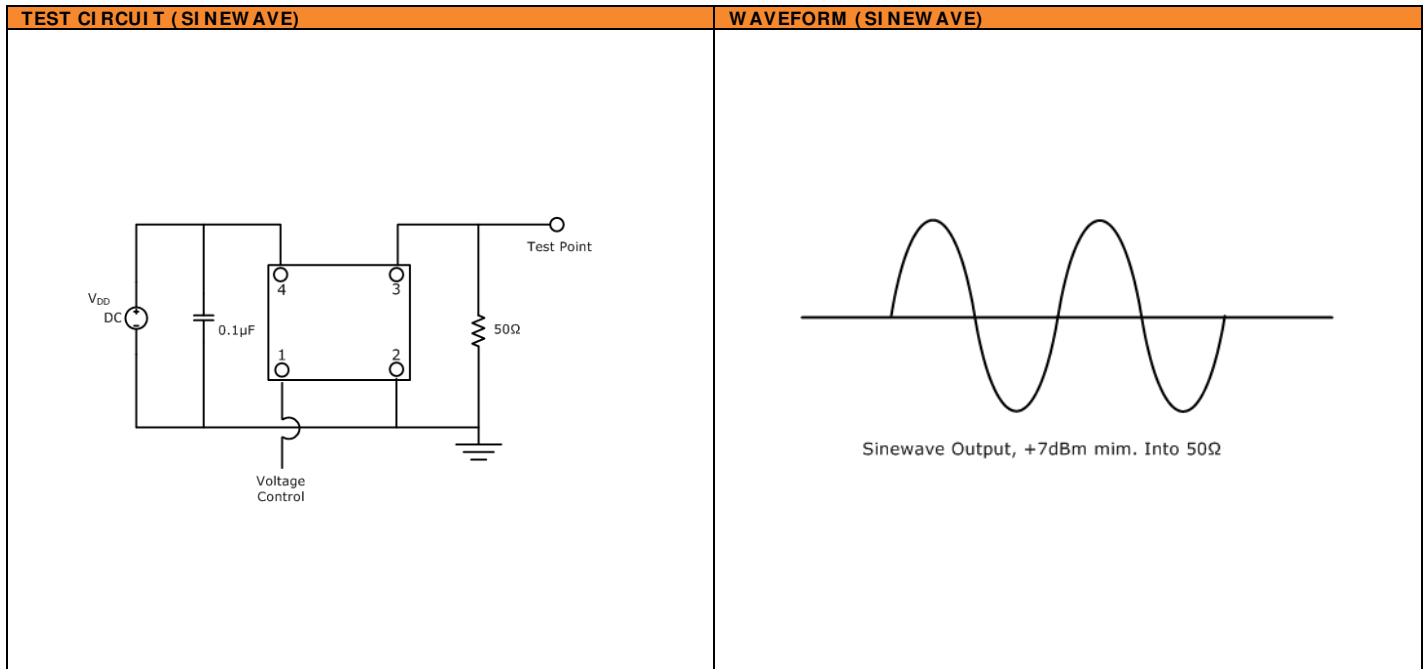
Cage Code: 4GUT4
To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS	
Frequency Range	MHz	10		80		
Frequency Tolerance at +25°C		-100		100		
Frequency Stability vs. Operating Temperature (Ref. 25°C)	ppb	-50		50	See part numbering guide for options.	
vs. Supply Voltage		-20		20	V _{DD} ±5% change.	
vs. Load		-20		20	±10% change.	
vs. Aging	ppm	-4.6		4.6	For 10 years.	
Operating Temperature	°C	-20		+60	See part numbering guide for options.	
Storage Temperature		-45		+85		
Supply Voltage (V _{DD})	V	V _{DD} -5%	V _{DD}	V _{DD} +5%	See part numbering guide for options.	
Power Consumption at Turn On	W			2.5		
Power Consumption at 25°C (Steady State)				1.0		
Control Voltage (V _c)	V	0.5		4.5		
Control Middle Voltage				2.5		
Pullability	ppm	±3.0	±5.0	±8.0		
Linearity	%			10		
V _c Input Impedance	kΩ	50				
Deviation Slope			Positive			
Output Logic (Sinewave)	Load	Ω		50		
	Waveform	dBm	7			
	Spurious (Harmonic)	dBc			-30	
	Spurious (Non-Harmonic)				-70	
Symmetry (Duty Cycle)	%	45	50	55		
Start-Up Time	ms			3		
Warm-Up Time	ppb	-100		100	At 25°C after 5 min.	

OUTLINE DRAWING

NOTE: Dimensions in millimeters (mm).

PIN	FUNCTION
1	VOLTAGE CONTROL
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 E Y W W</p> <p>Suntsu Manufacturing Identifier Week Year</p>
Lead Integrity	MIL-STD-883, Method 2004	
Gross Leak Test	MIL-STD-883, Method 1014, Condition C	
Mechanical Shock	MIL-STD-202, Method 213, Condition C	
Vibration	MIL-STD-883, Method 2007, Condition A	
Resistance to Soldering Heat	MIL-STD-202, Method 210	
Resistance to Solvents	MIL-STD-202, Method 215	
Solderability	MIL-STD-883, Method 2003	