

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> - ±7.5ppb (Frequency Stability) Available - Sinewave - OCXO - RoHS Compliant - AT-Cut or SC-Cut 	<ul style="list-style-type: none"> - Military Communication equipment - Base Stations - Test Equipment - Synthesizers - Digital Switching



PART NUMBERING GUIDE

SUNTSU OCXO → **SOC 36 S 12 K 27 A - 10.000M** ← **FREQUENCY (MHz)**

36.1mm x 27.2mm

SINEWAVE

SUPPLY VOLTAGE
 05: 5.0V±5%
 09: 9.0V±5%
 12: 12.0V±5%
 15: 15.0V±5%

FREQUENCY STABILITY
 F: ±500ppb
 I: ±200ppb
 J: ±100ppb
 K: ±50ppb
 L: ±20ppb
 M: ±10ppb

AGING
 BLANK: ±500ppb/year
 A: ±200ppb/year
 B: ±100ppb/year
 C: ±50ppb/year

OPERATING TEMPERATURE RANGE
 05: 0°C to + 50°C
 15: -10°C to + 55°C
 27: -20°C to + 70°C
 37: -30°C to + 70°C
 47: -40°C to + 70°C

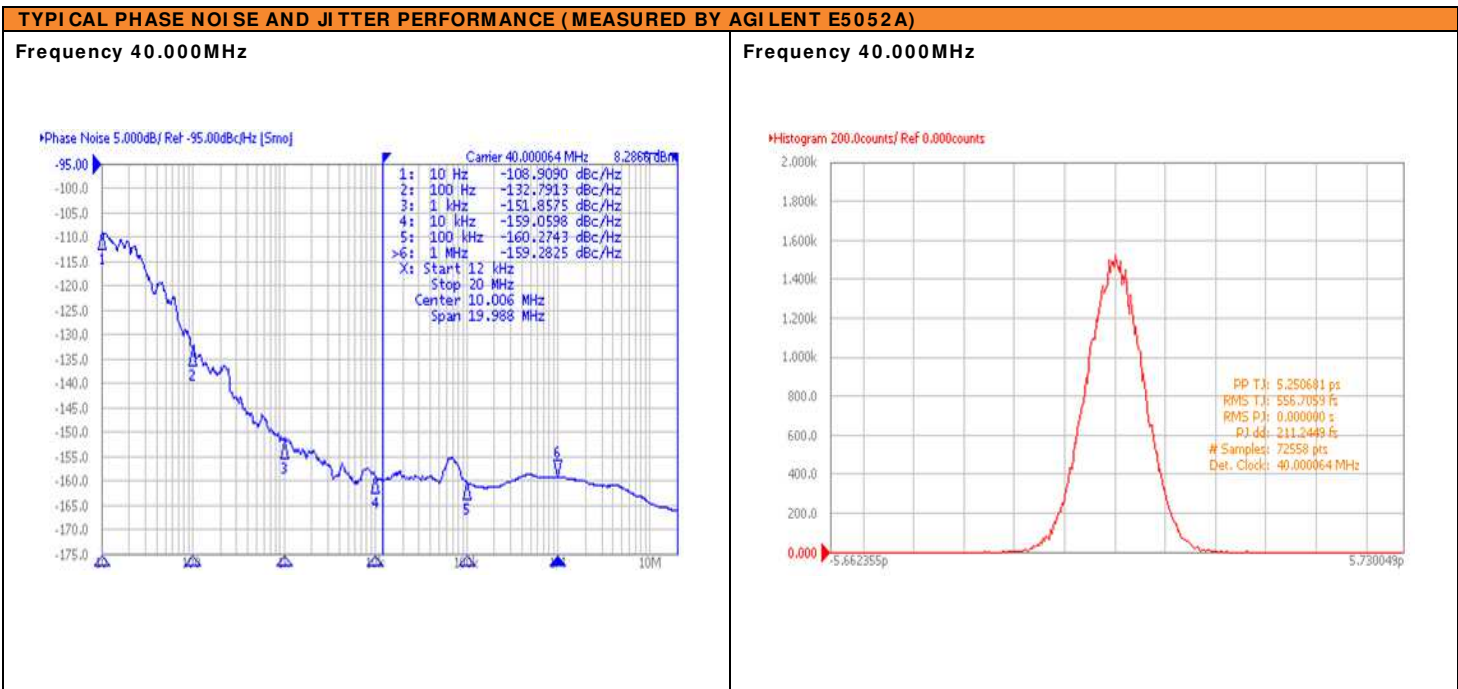
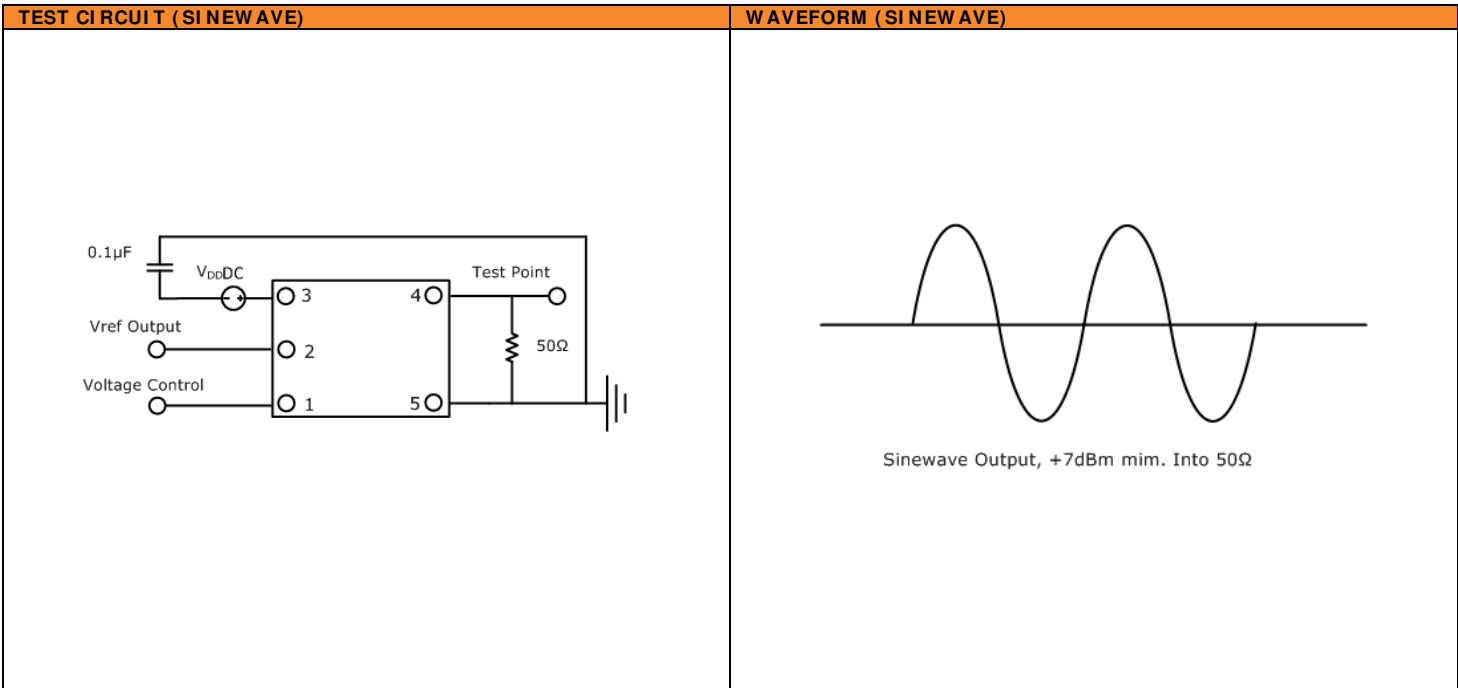
Cage Code: 4GUT4
 To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS	UNITS	MIN.	TYP.	MAX.	REMARKS	
Frequency Range	MHz	5		100		
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		-5		5	V _{DD} ±5% change.	
vs. Load		-5		5	±10% change.	
vs. Aging/Year		-500		500	See part numbering guide for options.	
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			4.5		
Power Consumption at 25°C (Steady State)				1.5		
Control Voltage (V _C)	V	0.0		5.0		
Control Middle Voltage				2.5		
Pullability	ppm	±0.7				
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)	dBc			-70	
Reference Voltage Output (V _{ref})	V	4.5		5	4.5V at V _{DD} 5.0V, 5V at V _{DD} 12V	
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	REFERENCE VOLTAGE OUTPUT
3	V _{DD}
4	OUTPUT
5	GROUND



ENVIRONMENTAL & MECHANICAL SPECIFICATIONS	MARKING
Temperature Cycling	MIL-STD-883, Method 1010, Condition B
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

Frequency in MHz

Line 1: $\overline{X X.X X X}$

Line 2: $\overline{S F Y W W}$

Suntsu Manufacturing Identifier Week Year