

FEATURES	APPLICATIONS
<ul style="list-style-type: none"> <li>- ±10ppb (Frequency Stability) Available</li> <li>- HCMOS/TTL</li> <li>- OCXO</li> <li>- RoHS Compliant</li> </ul>	<ul style="list-style-type: none"> <li>- Military Communication equipment</li> <li>- Base Stations</li> <li>- Test Equipment</li> <li>- Synthesizers</li> <li>- Digital Switching</li> </ul>



**PART NUMBERING GUIDE**

**SUNTSU OCXO** → **SOC 38 C 12 M 37 - 10.000M** ← **FREQUENCY (MHz)**

**38.1mm x 38.1mm**

**HCMOS**

**SUPPLY VOLTAGE**

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

**OPERATING TEMPERATURE RANGE**

05: 0°C to + 50°C  
15: -10°C to + 55°C  
26: -20°C to + 60°C  
37: -30°C to + 70°C

**FREQUENCY STABILITY**

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

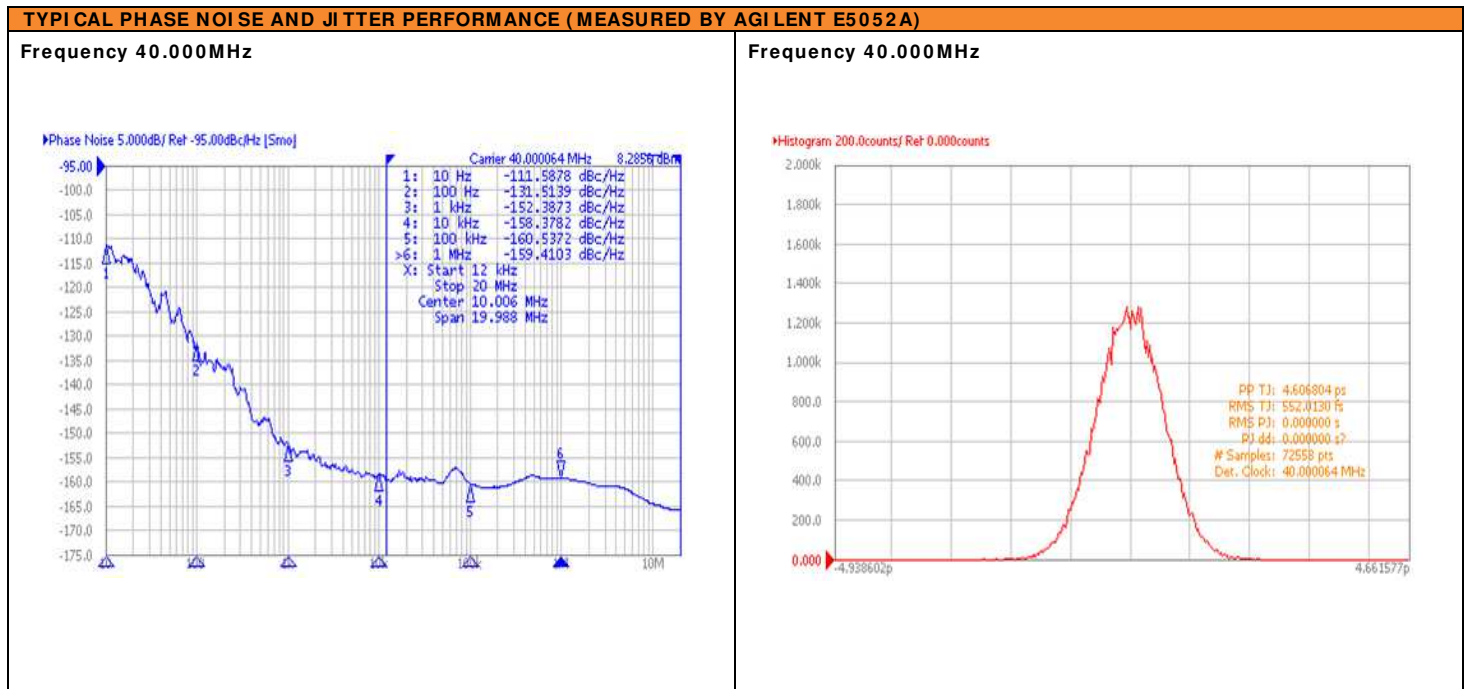
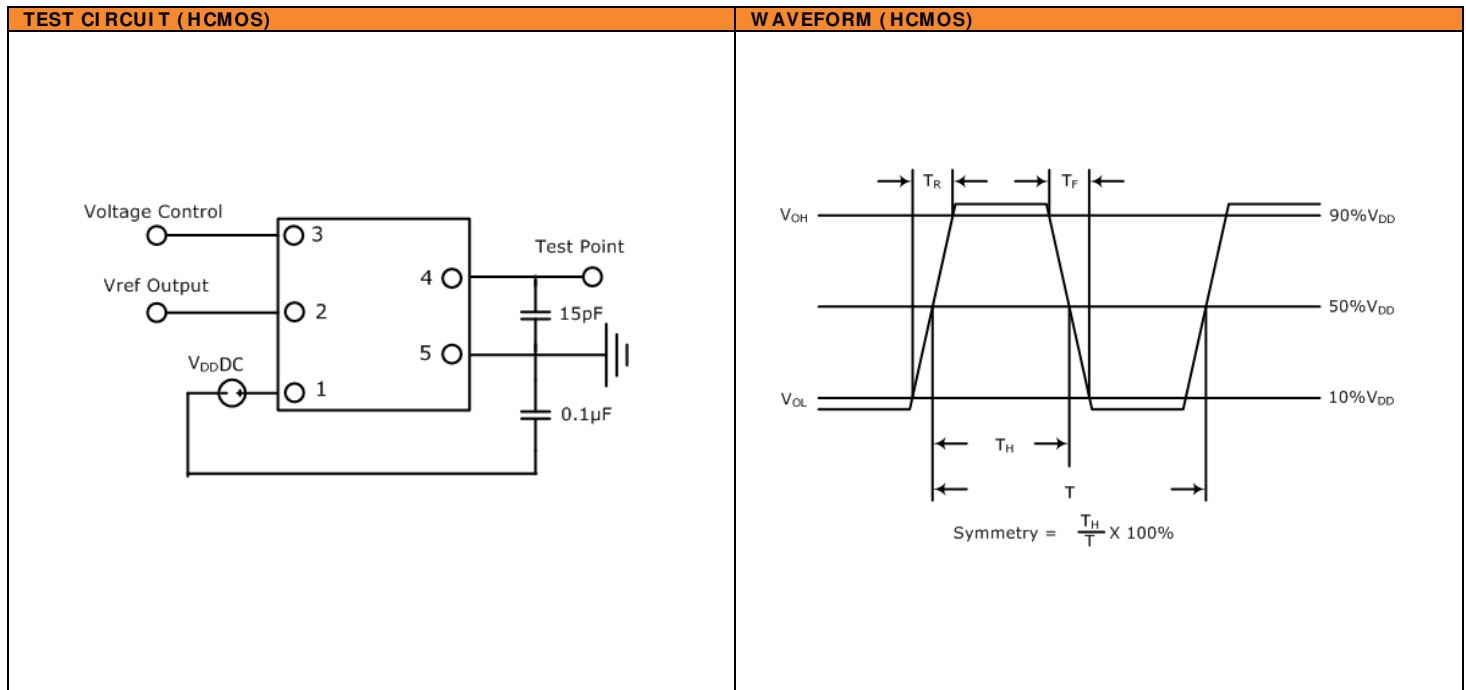
Cage Code: 4GUT4  
To customize your parameters contact a Suntsu representative.

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)			-10		10	See part numbering guide for options.
vs. Supply Voltage		ppb	-2		2	V <sub>DD</sub> ±5% change.
vs. Load			-2		2	±10% change.
vs. Aging			-50		50	For year.
Operating Temperature		°C	-30		+70	See part numbering guide for options.
Storage Temperature			-45		+85	
Supply Voltage (V <sub>DD</sub> )	5.0V Option	V	4.750	5.0	5.250	
	9.0V Option		8.550	9.0	9.450	
	12.0V Option		11.40	12.0	12.60	
	15.0V Option		14.25	15.0	15.75	
Power Consumption at Turn On		W			4.5	
Power Consumption at 25°C (Steady State)					1.8	
Control Voltage (V <sub>C</sub> )		V	0.0		5.0	
Control Middle Voltage				2.5		
Pullability		ppm	±0.7			
Linearity		%			10	
V <sub>C</sub> Input Impedance		kΩ	50			
Deviation Slope				Positive		
Output Load (HCMOS)		pF			15	
Output Logic Levels	Output Logic High (V <sub>OH</sub> )	V	0.9*V <sub>DD</sub>			
	Output Logic Low (V <sub>OL</sub> )				0.1*V <sub>DD</sub>	
Reference Voltage Output (V <sub>ref</sub> )		V			5	
Symmetry (Duty Cycle)		%	45	50	55	
Warm-Up Time		ppb	-10		10	At 25°C after 20 min.

**OUTLINE DRAWING**

NOTE: Dimensions in millimeters (mm).

PIN	FUNCTION
1	V <sub>DD</sub>
2	REFERENCE VOLTAGE OUTPUT
3	VOLTAGE CONTROL
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

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Line 1: X X . X X X

Line 2: S F Y W W

Suntsu Manufacturing Identifier      ↑      ↑      ↑      ↑      Week Year