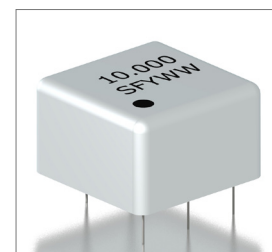


Features

- ± 10 ppb (Frequency Stability) Available
- Sinewave
- OCXO

Applications

- Military Communication Equipment
- Base Stations
- Test Equipment
- Synthesizers
- Digital Switching



Part Numbering Guide

SOC 38 S 12 K 27 - 10.000M

SUNTSU OCXO

38.1mm x 38.1mm

SINEWAVE



SUPPLY VOLTAGE

05 : 5.0V $\pm$ 5%
09 : 9.0V $\pm$ 5%
12 : 12.0V $\pm$ 5%
15 : 15.0V $\pm$ 5%

FREQUENCY STABILITY

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

FREQUENCY
MHz

OPERATING
TEMPERATURE RANGE

05 : 0°C - +50°C
15 : -10°C - +55°C
27 : -20°C - +70°C
37 : -30°C - +70°C

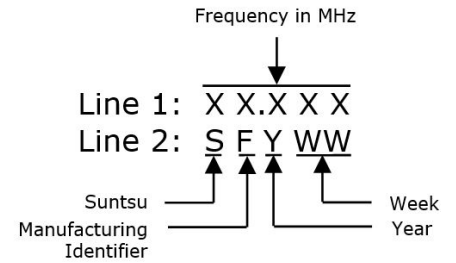
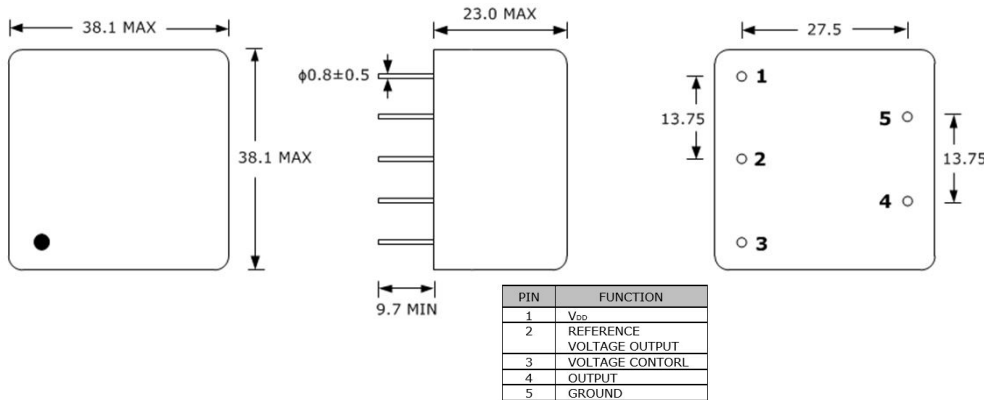
Cage Code: 4GUT4

To customize your parameters contact a Suntsu representative.

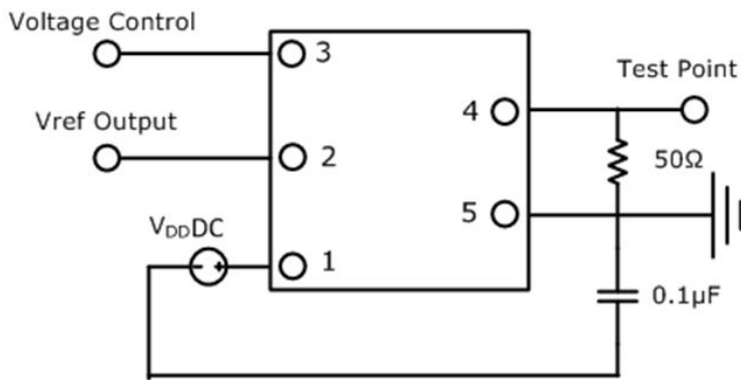
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	5		100	
Frequency Tolerance at +25°C	ppb	-100		+100	
Freq. Stability vs. Op Temp.	ppb	-10		+10	See part numbering guide for options.
Freq. Stability vs. Supply Voltage	ppb	-2		+2	V _{DD} $\pm$ 5% Change
Freq. Stability vs. Load	ppb	-2		+2	$\pm 10\%$ Change
Freq. Stability vs. Aging/Year	ppb	-50		+50	See part numbering guide for options.
Operating Temperature	°C	-30		+70	See part numbering guide for options.
Storage Temperature	°C	-45		+85	
Supply Voltage (V _{DD})	V	V _{DD} -5%	V _{DD}	V _{DD} +5%	
Power Consumption At Turn On	W			4.5	
Power Consumption At 25°C	W			1.8	
Control Voltage (V _C)	V	0.0		5.0	
Control Middle Voltage	V		2.5		
Pullability	ppm	± 0.7			
Linearity	%			10	
V _C Input Impedance	K Ω	50			
Deviation Slope			Positive		
Output Logic (SINEWAVE) Load	Ω			50	
Output Logic Waveform	dBm	7			
Output Logic Spurious (Harmonic)	dBc			-30	
Output Logic Spurious (Non-Harmonic)	dBc			-70	
Reference Voltage Output (V _{ref})	V			5	
Symmetry (Duty Cycle)	%	45	50	55	
Start-Up Time	ms			3	At 25°C After 5Mins.
Warm-Up Time	ppb	-100		100	

Outline Drawing & Part Marking

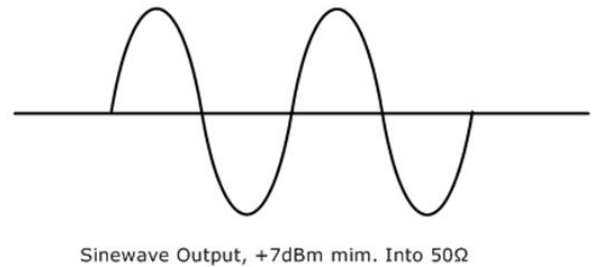
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



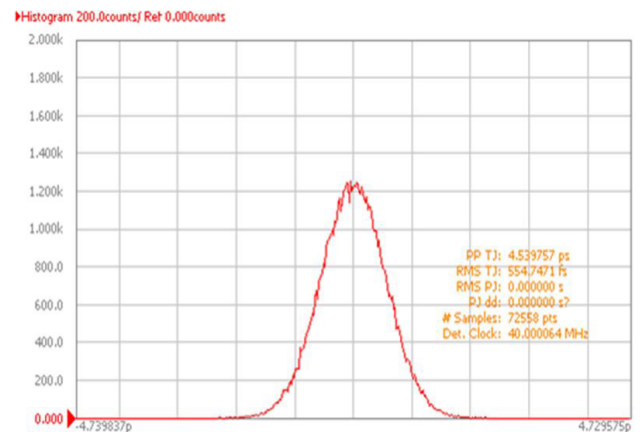
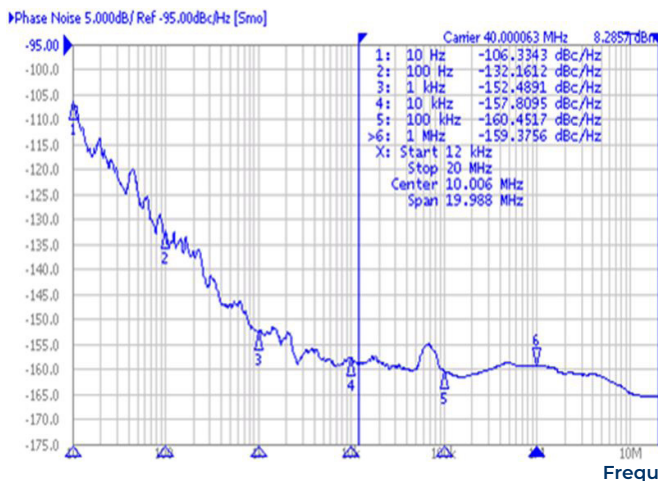
Test Circuit (Sinewave)



Waveform (Sinewave)



Typical Phase Noise And Jitter Performance (Measured By Agilent E5052A)



Environmental Specifications		Mechanical Specifications	
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition B
Lead Integrity	MIL-STD-883, Method 1014, Condition A	Vibration	MIL-STD-883, Method 2007, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition A
Solderability	MIL-STD-883, Method 2003	Resistance to Solvents	MIL-STD-202, Method 215