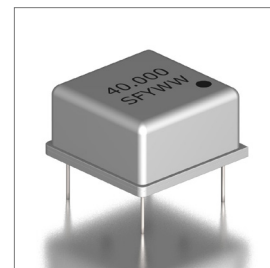


### Features

- $\pm 20$ ppm (Frequency Stability) Available
- Standard Half-Size Package
- CMOS/TTL Compatible

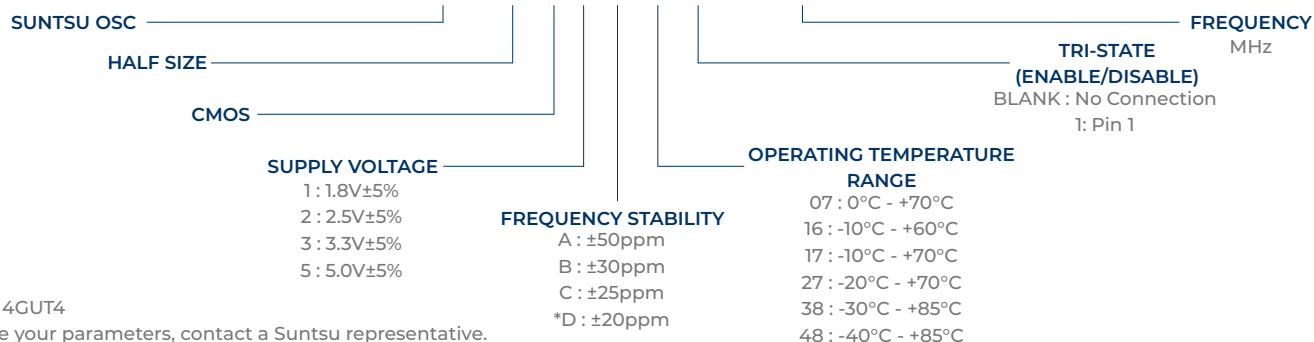
### Applications

- PC
- Monitor
- Vision Equipment
- Printer
- FAX



### Part Numbering Guide

**SXO HS C 3 A 48 1 - 40.000M**



Cage Code : 4GUT4

To customize your parameters, contact a Suntsu representative.

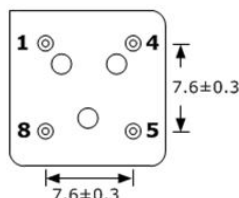
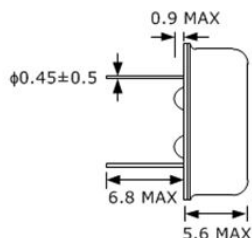
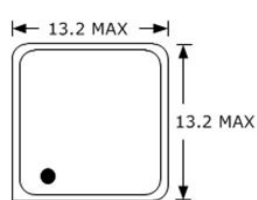
\* For Frequency stability option D, contact a Suntsu representative.

Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	0.0327		155.52	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)	ppm	-20		+20	See part numbering guide for options
Operating Temperature	°C	-40		+85	See part numbering guide for options
Storage Temperature	°C	-55		+125	
Supply Voltage (V <sub>DD</sub> ) - 1.8V option	V	1.620	1.8	1.980	
Supply Voltage (V <sub>DD</sub> ) - 2.5V option	V	2.375	2.5	2.625	
Supply Voltage (V <sub>DD</sub> ) - 3.3V option	V	3.135	3.3	3.465	
Supply Voltage (V <sub>DD</sub> ) - 5.0V option	V	4.750	5.0	5.250	
Current (I <sub>DD</sub> ) - 1.8V option	mA			10	
Current (I <sub>DD</sub> ) - 2.5V option	mA			20	
Current (I <sub>DD</sub> ) - 3.3V option	mA			30	
Current (I <sub>DD</sub> ) - 5.0V option	mA			40	
Output Load (CMOS)	pF			15	
Output Load (TTL)	TTL			10	
Output Logic Levels High (V <sub>OH</sub> ) - CMOS	V	0.9*V <sub>DD</sub>			
Output Logic Levels Low (V <sub>OL</sub> ) - CMOS	V			0.1*V <sub>DD</sub>	
Output Logic Levels High (V <sub>OH</sub> ) - TTL	V	2.4			
Output Logic Levels Low (V <sub>OL</sub> ) - TTL	V			0.4	
Rise (TR) and Fall (TF) Time	ns			5	
Symmetry (Duty Cycle)	%	45	50	55	
Tri-State Input Voltage - Enable	V	0.7*V <sub>DD</sub>			
Tri-State Input Voltage - Disable	V			0.3*V <sub>DD</sub>	
Start-Up Time	ms			10	
Phase Jitter (12kHz ~ 20MHz)	ps			1	



### Outline Drawing & Part Marking

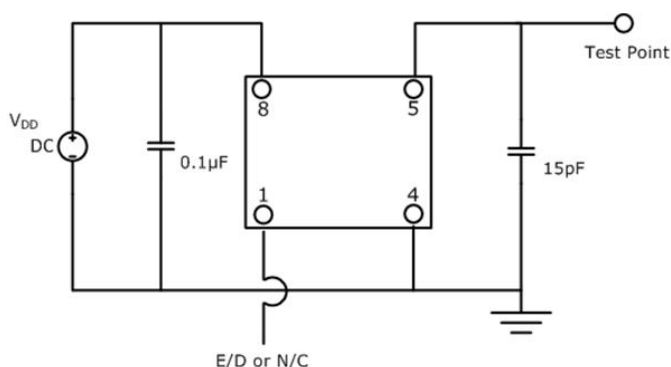
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



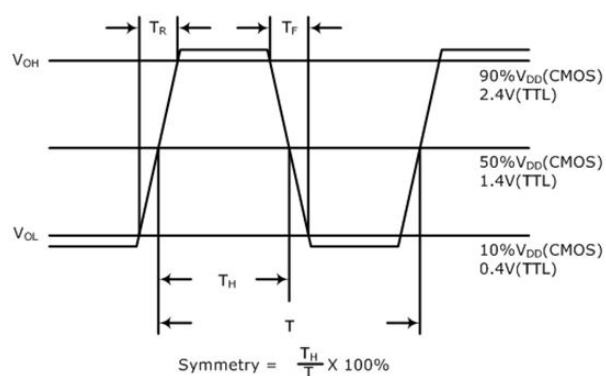
Frequency in MHz  
 Line 1: X X.X X X  
 Line 2: S F Y W W  
 Suntsu Manufacturing Identifier      Week Year

PIN	FUNCTION
1	TRI-STATE or NC
4	GND
5	OUTPUT
8	V <sub>DD</sub>

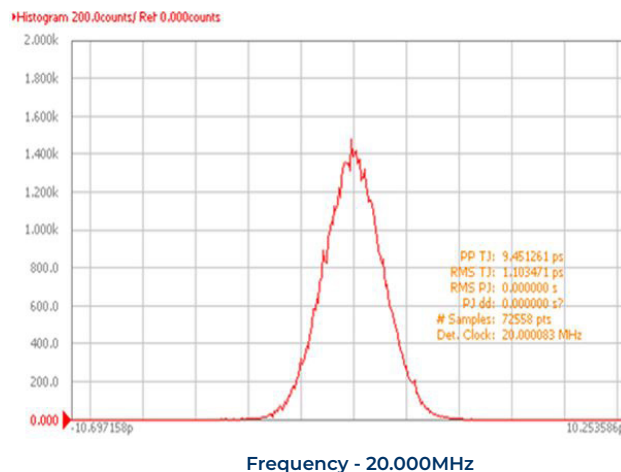
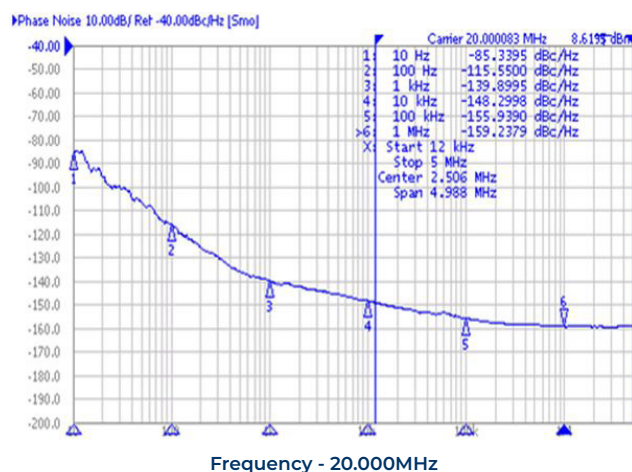
### Test Circuit (CMOS /TTL COMPATIBLE)



### Waveform (CMOS /TTL COMPATIBLE)



### Typical Phase Noise & 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
Fine Leak Test	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	Moisture Resistance	MIL-STD-883, Method 1004
Solderability	MIL-STD-883, Method 2003	Resistance to Solvents	MIL-STD-202, Method 215
Moisture Sensitivity	J-STD-020, MSL 1	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K