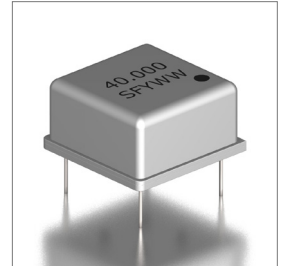


Features
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Standard Half-Size Package CMOS/TTL Compatible

Applications
<ul style="list-style-type: none"> PC Monitor Vision Equipment Printer FAX



Part Numbering Guide

SXO HS C 3 A 48 1 - 40.000M

SUNTSU OSC

HALF SIZE

CMOS

SUPPLY VOLTAGE

1 : 1.8V±5%

2 : 2.5V±5%

3 : 3.3V±5%

5 : 5.0V±5%

FREQUENCY STABILITY

A : ±50ppm

B : ±30ppm

C : ±25ppm

*D : ±20ppm

OPERATING TEMPERATURE RANGE

07 : 0°C - +70°C

16 : -10°C - +60°C

17 : -10°C - +70°C

27 : -20°C - +70°C

38 : -30°C - +85°C

48 : -40°C - +85°C

FREQUENCY
MHz

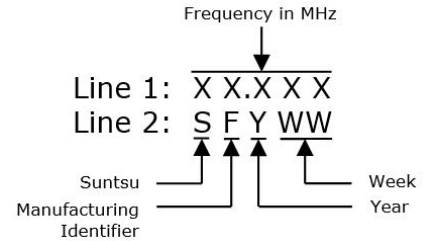
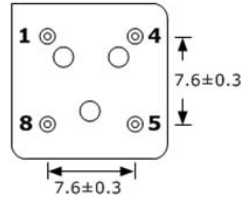
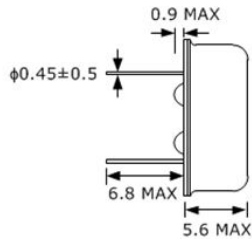
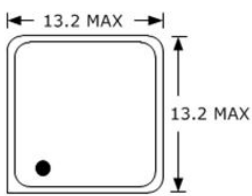
TRI-STATE (ENABLE/DISABLE)
BLANK : No Connection
1 : Pin 1

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 _{DD}) - 1.8V option	V	1.620	1.8	1.980	
Supply Voltage (V _{DD}) - 2.5V option	V	2.375	2.5	2.625	
Supply Voltage (V _{DD}) - 3.3V option	V	3.135	3.3	3.465	
Supply Voltage (V _{DD}) - 5.0V option	V	4.750	5.0	5.250	
Current (I _{DD}) - 1.8V option	mA			10	
Current (I _{DD}) - 2.5V option	mA			20	
Current (I _{DD}) - 3.3V option	mA			30	
Current (I _{DD}) - 5.0V option	mA			40	
Output Load (CMOS)	pF			15	
Output Load (TTL)	TTL			10	
Output Logic Levels High (V _{OH}) - CMOS	V	0.9*V _{DD}			
Output Logic Levels Low (V _{OL}) - CMOS	V			0.1*V _{DD}	
Output Logic Levels High (V _{OH}) - TTL	V	2.4			
Output Logic Levels Low (V _{OL}) - 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 _{DD}			
Tri-State Input Voltage - Disable	V			0.3*V _{DD}	
Start-Up Time	ms			10	
Phase Jitter (12kHz ~ 20MHz)	ps			1	

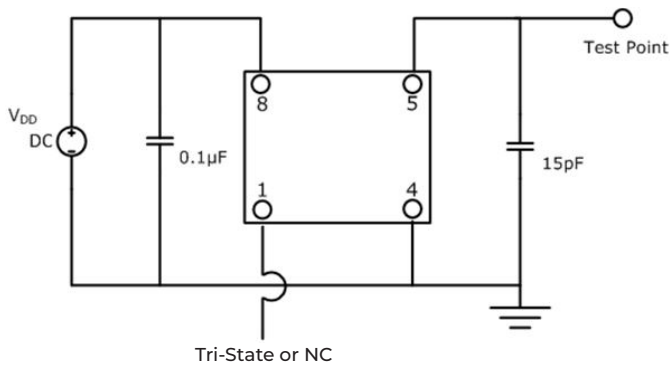
Outline Drawing & Part Marking

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

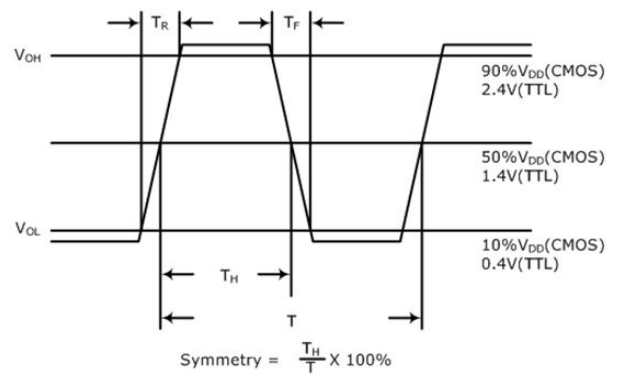


PIN	FUNCTION
1	TRI-STATE or NC
4	GND
5	OUTPUT
8	V _{DD}

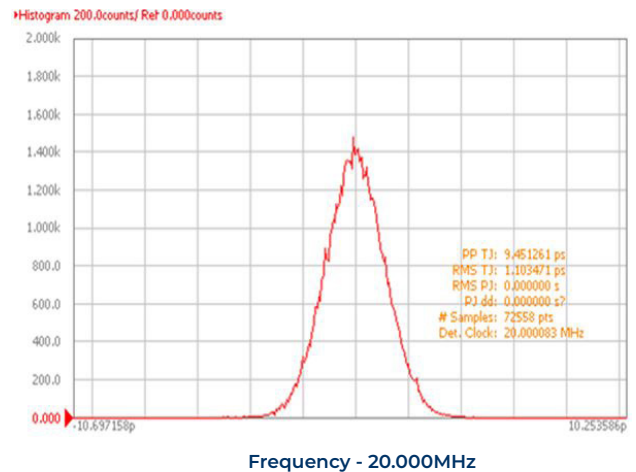
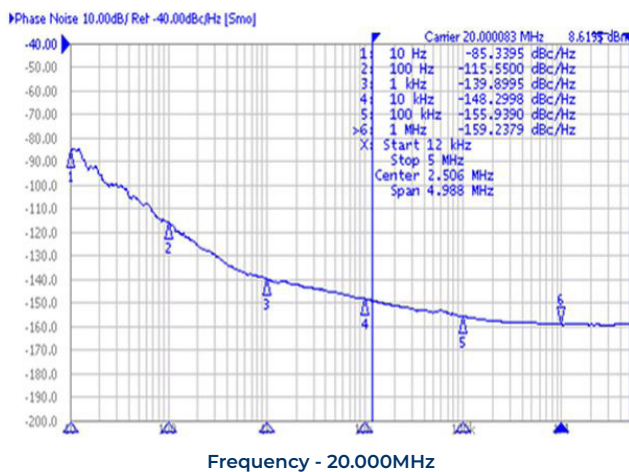
Test Circuit (CMOS /TTL COMPATIBLE)



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