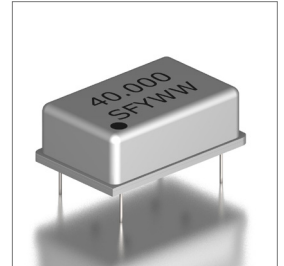


Features
<ul style="list-style-type: none"> <li>±20ppm (Frequency Stability) Available</li> <li>Standard Full-Size Package</li> <li>CMOS/TTL Compatible</li> </ul>

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



**Part Numbering Guide**

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

**SUNTSU OSC**

**FULL SIZE**

**CMOS**

**SUPPLY VOLTAGE**

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

**TRI-STATE (ENABLE/DISABLE)**

BLANK : No Connection

1 : Pin 1

**FREQUENCY** MHz

Cage Code : 4GUT4

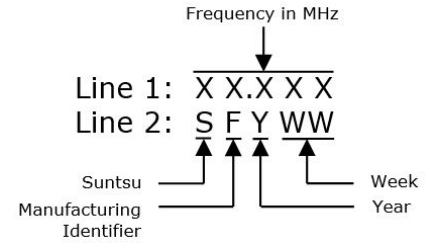
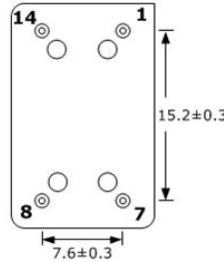
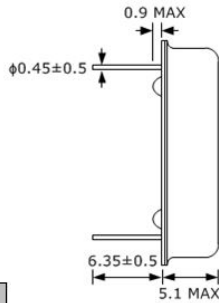
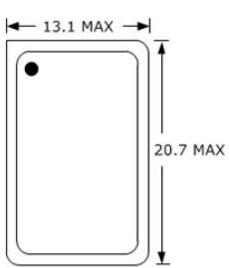
To customize your parameters, contact a Suntsu representative.

\* 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> ) - 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> ) - 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>			No Connection
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

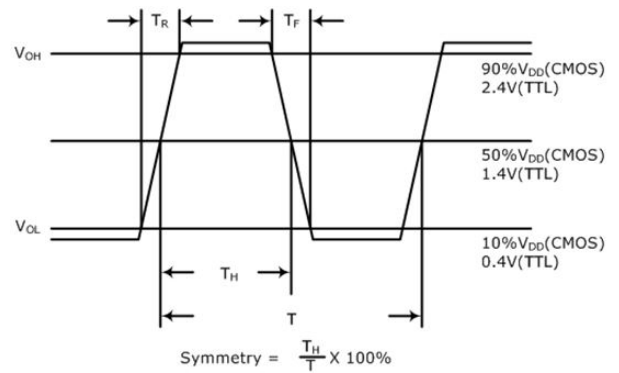
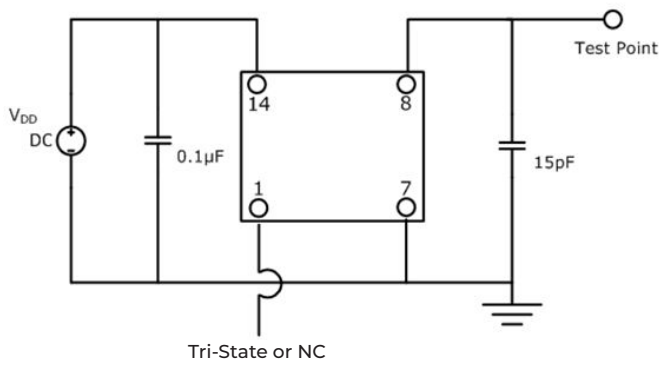
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



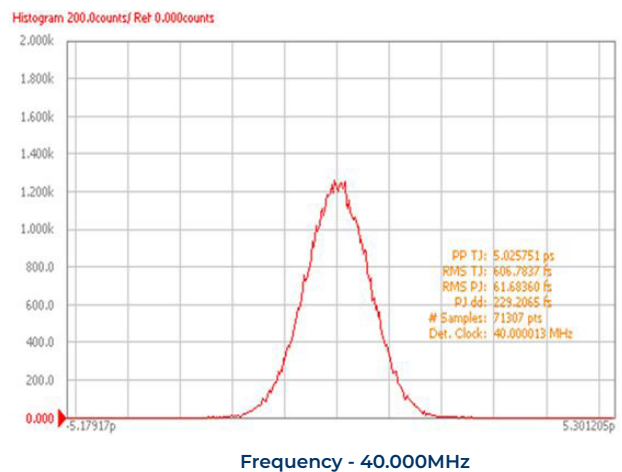
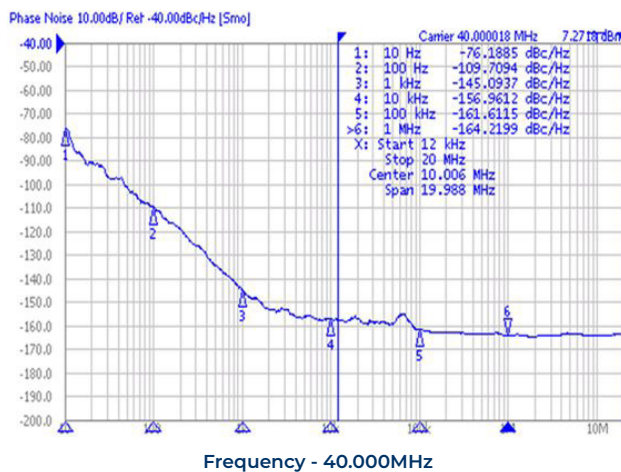
PIN	FUNCTION
1	TRI-STATE or NC
7	GND
8	OUTPUT
14	V <sub>DD</sub>

## 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