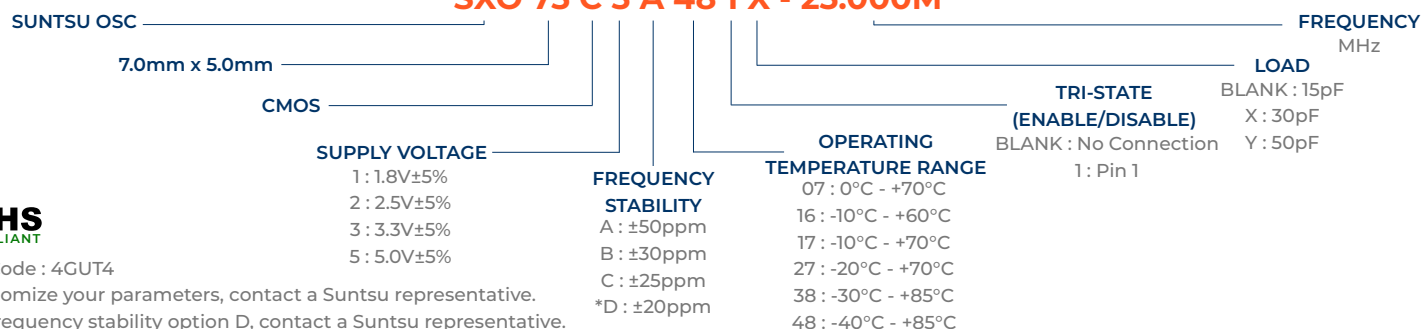


Features	Applications	
• ± 20ppm (Frequency Stability) Available • Ceramic Package • CMOS • Tape and Reel	• Micro Processors • SONET/SDH/DWDM • Storage Area/Networking • Digital Video • Base Stations	

Part Numbering Guide

SXO 75 C 3 A 48 1 X - 25.000M



Cage Code : 4GUT4

To customize your parameters, contact a Suntsu representative.

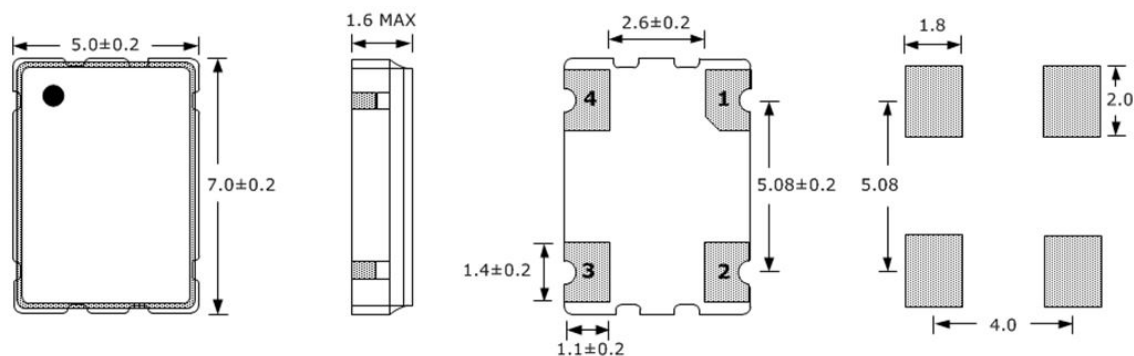
* For Frequency stability option D, contact a Suntsu representative.

** For operating temperatures up to -55-125°C contact a Suntsu representative.

Electrical Parameters		Units	Minimum	Typical	Maximum	Remarks
Frequency Range		KHz	32.768*			(*32.768KHz not available in 5.0V)
Frequency Range		MHz	1		200*	(*125MHz Max for 5.0V Option)
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	1.710	1.8	1.890	
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	4.75	5.0	5.25	
Frequency Range			1.8V	2.5V	3.3V / 5.0V	
Current (I _{DD})	32.768KHz	mA	5	5	5 / *NA	Maximum Value (*32.768KHz not available in 5.0V)
	1.0000MHz - 34.999MHz	mA	8	10	16 / 25	Maximum Value
	35.000MHz - 59.999MHz	mA	10	20	25 / 40	Maximum Value
	60.000MHz - 99.000MHz	mA	25	30	40 / 70	Maximum Value
	100.000MHz - 200.000MHz	mA	35	50	65 / 90*	Maximum Value (*at 125MHz Max for 5.0V)
Output Load (CMOS)		pF			15	See part numbering guide for options
Output Logic Levels High (V _{OH})		V	0.9*V _{DD}			
Output Logic Levels Low (V _{OL})		V			0.1*V _{DD}	
32.768KHz		ns			200	
Rise (TR) and Fall (TF) Time	1.0000MHz - 34.999MHz	ns			10	
	35.000MHz - 99.999MHz	ns			6	
	100.000MHz - 200.000MHz	ns			3	
Symmetry (Duty Cycle)		%	45	50	55	
Tri-State Input Voltage - Enable		V	0.7*V _{DD}			No Connection
Tri-State Input Voltage - Disable		V			0.3*V _{DD}	
Start-Up Time		ms			10	
Phase Jitter (12kHz ~ 20MHz)		ps			1	

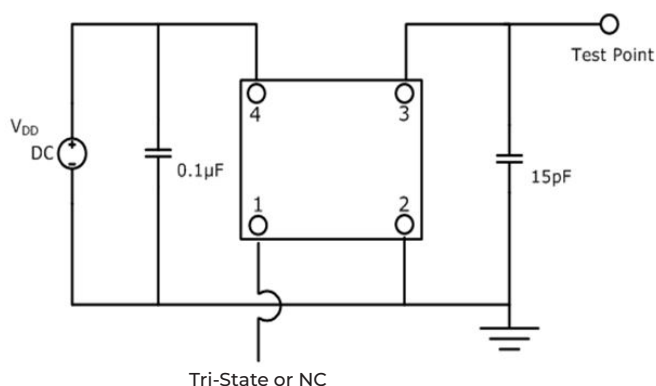
Outline Drawing & Land Pattern

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

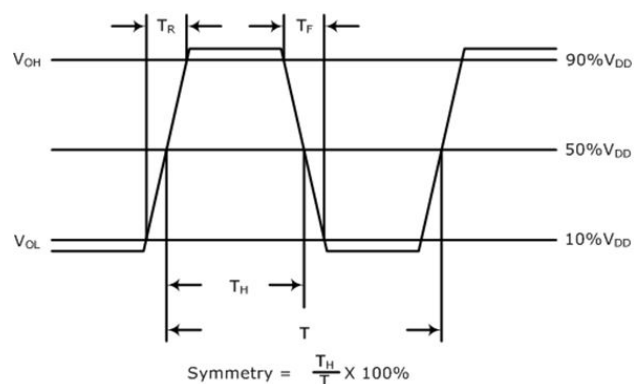


PIN	FUNCTION
1	TRI-STATE or NC
2	GND
3	OUTPUT
4	V _{DD}

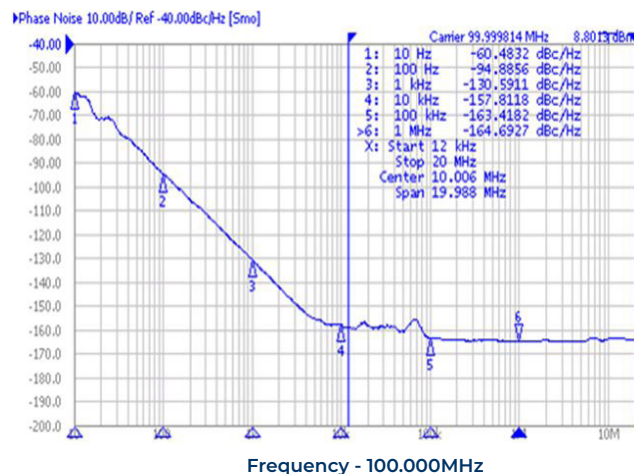
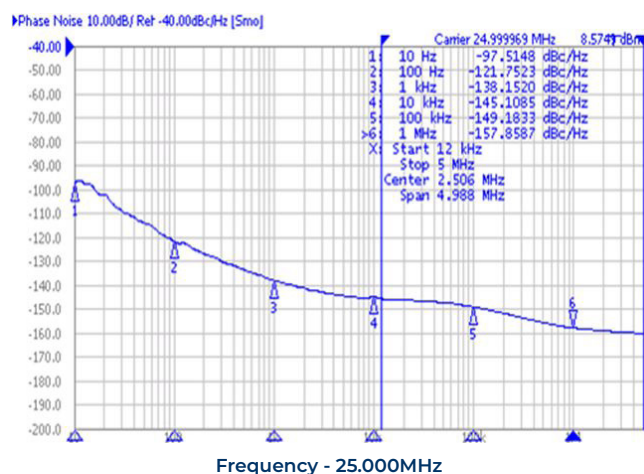
Test Circuit (CMOS)



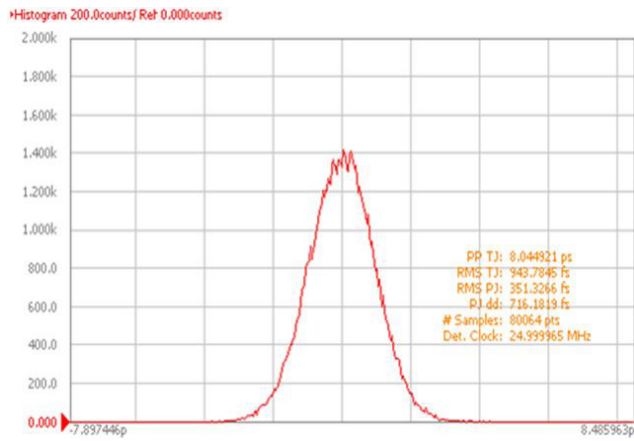
Waveform (CMOS)



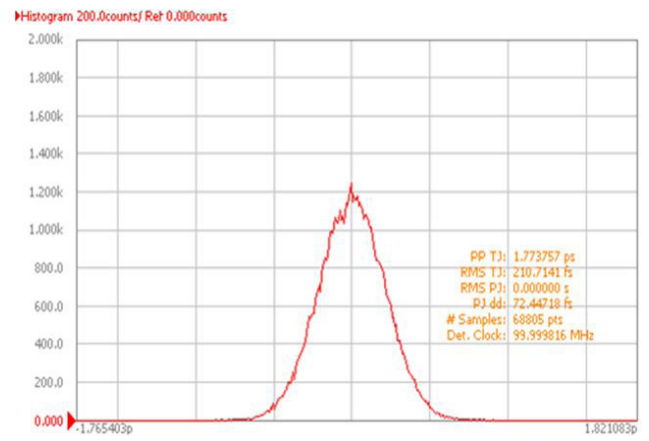
Typical Phase Noise Performance (Measured By Agilent E5052A)



Typical Jitter Performance (Measured By Agilent E5052A)

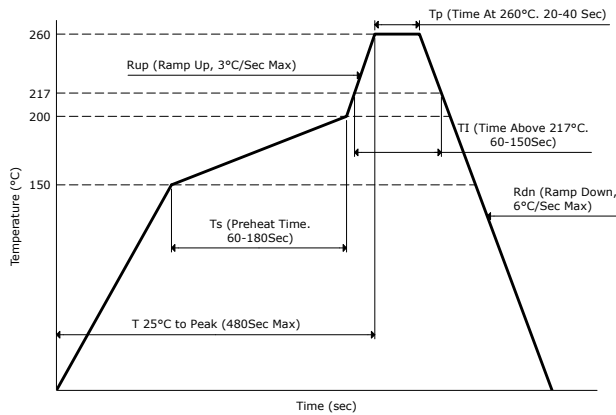


Frequency - 25.000MHz

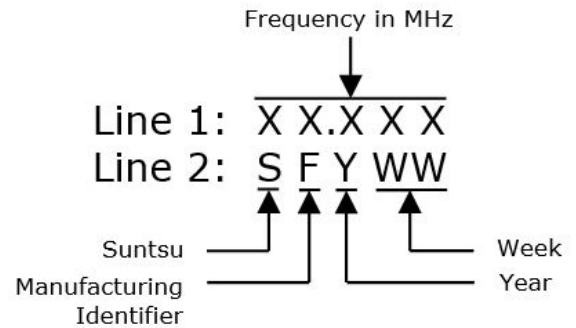


Frequency - 100.000MHz

Reflow Profile



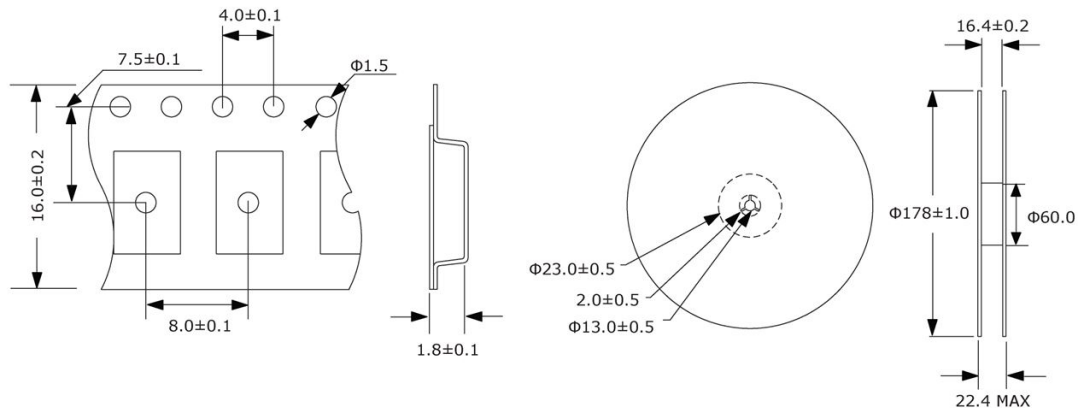
Part Marking



Tape And Reel Dimensions

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

1,000pcs/Reel



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