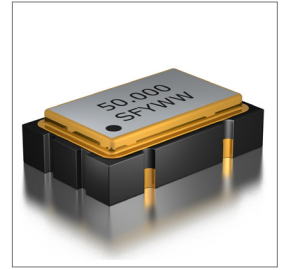
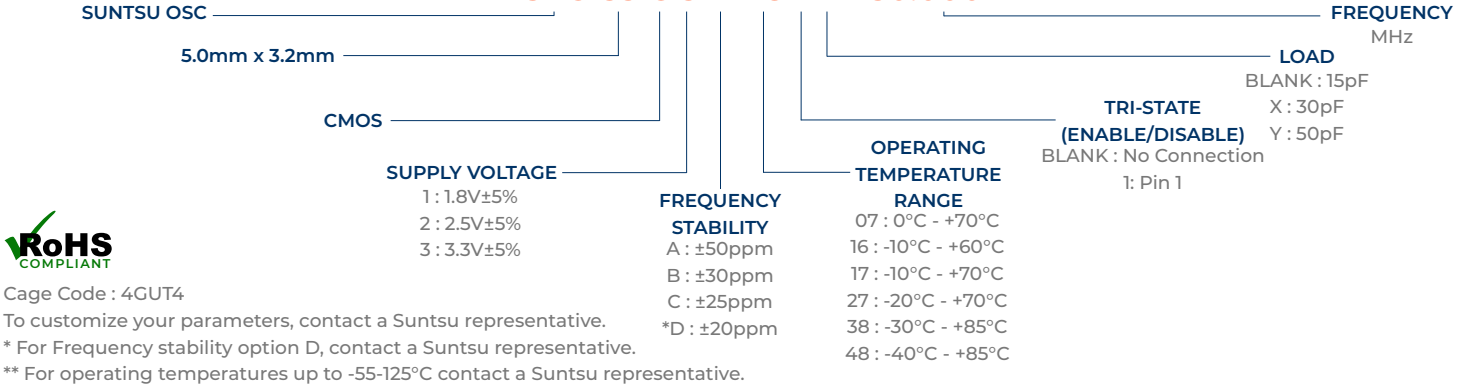


Features
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package CMOS Tape and Reel

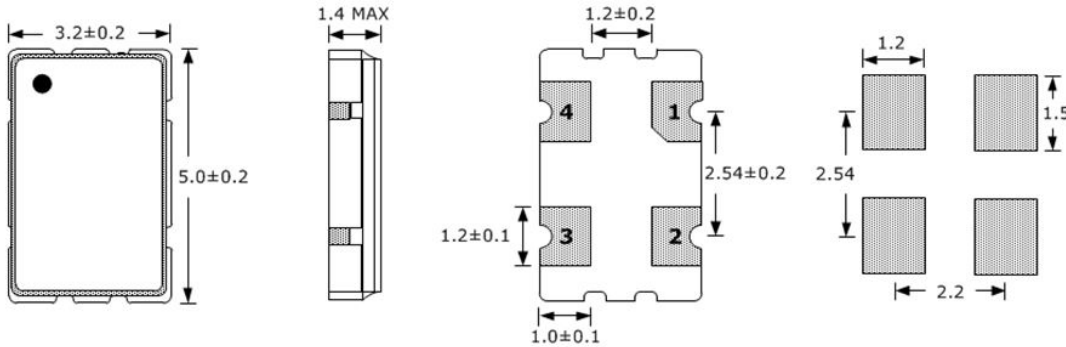
Applications
<ul style="list-style-type: none"> Micro Processors SONET/SDH/DWDM Storage Area/Networking Digital Video Base Stations


Part Numbering Guide
SXO 53 C 3 A 48 1 X - 50.000M


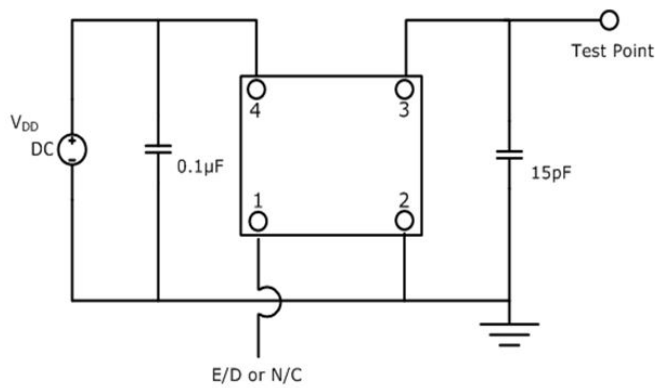
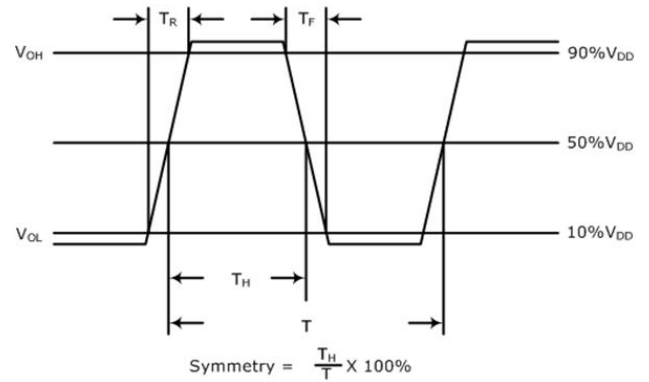
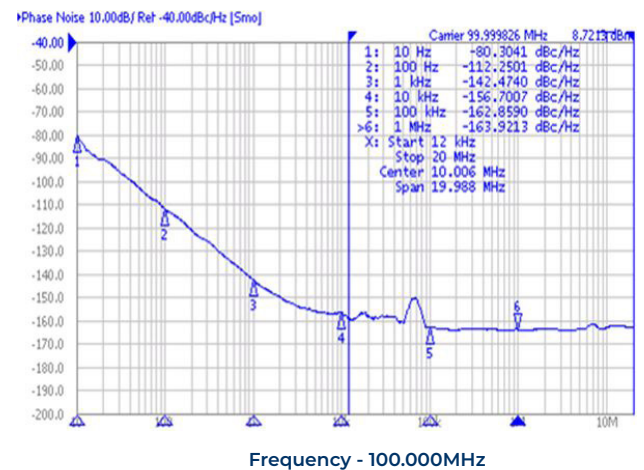
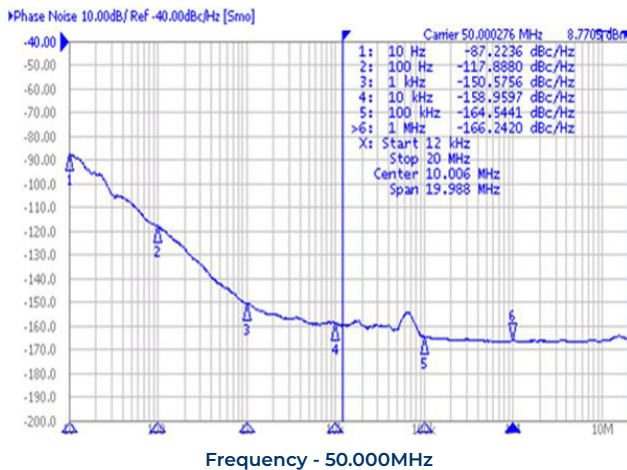
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	KHz	32.768			
Frequency Range	MHz	1		200	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)	ppm	-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	
Frequency Range		1.8V	2.5V	3.3V	
Current (I _{DD})	mA	5	5	5	Maximum Value
32.768KHz	mA	8	10	16	Maximum Value
1.0000MHz - 34.999MHz	mA	10	20	25	Maximum Value
35.000MHz - 59.999MHz	mA	25	30	40	Maximum Value
60.000MHz - 99.999MHz	mA	35	40	50	Maximum Value
100.000MHz - 160.000MHz					
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}	
Rise (TR) and Fall (TF) Time	ns			200	
32.768KHz	ns			10	
1.0000MHz - 34.999MHz	ns			6	
35.000MHz - 99.999MHz	ns			3	
100.000MHz - 160.000MHz					
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

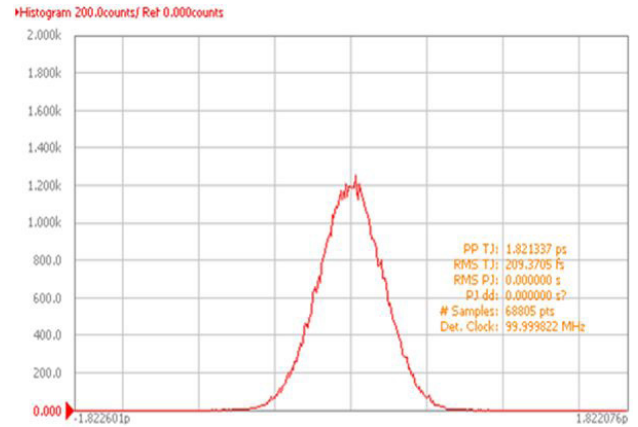
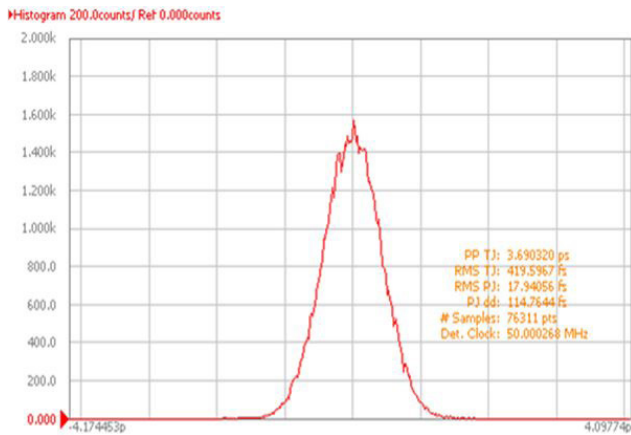
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



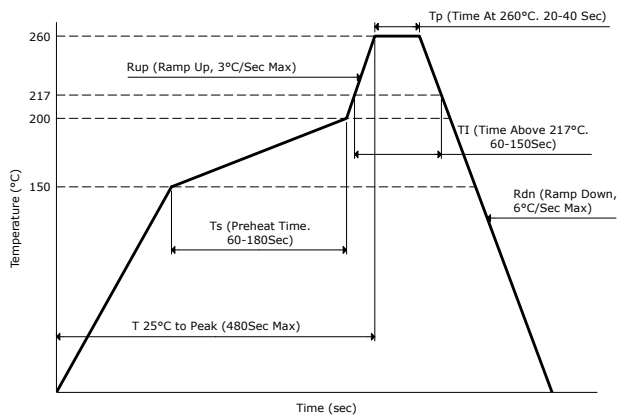
PIN	FUNCTION
1	TRI-STATE or NC
2	GND
3	OUTPUT
4	V _{DD}

Test Circuit (CMOS)

Waveform (CMOS)

Typical Phase Noise Performance (Measured By Agilent E5052A)


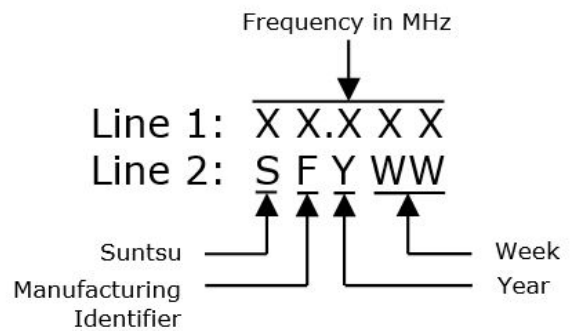
Typical Jitter Performance (Measured By Agilent E5052A)



Reflow Profile



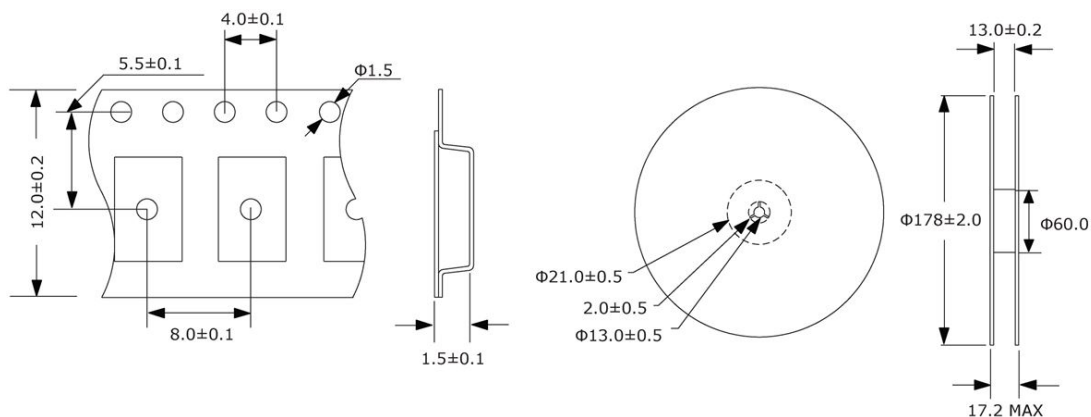
Part Marking



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