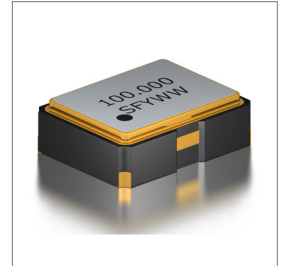
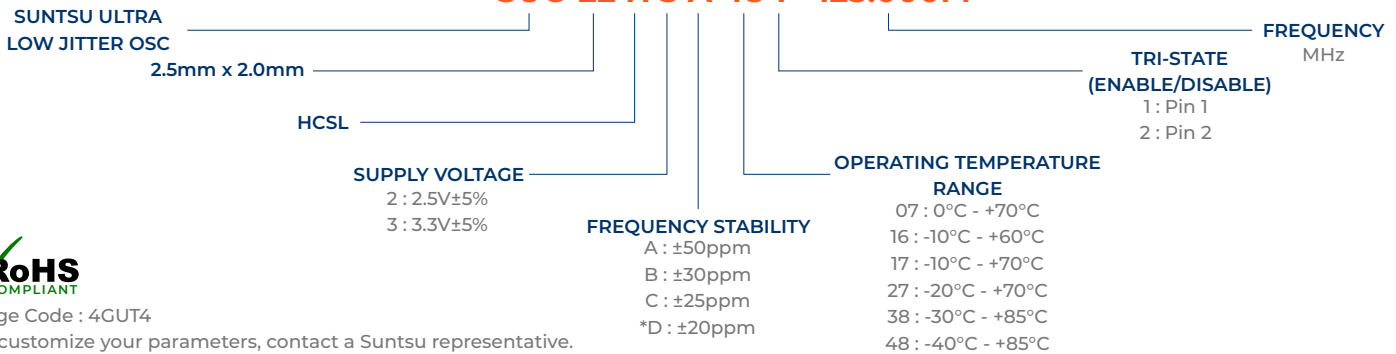


Features
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package HCSL Ultra Low Jitter Tape and Reel

Applications
<ul style="list-style-type: none"> Fiber Channel Gigabit Ethernet PCI Express


Part Numbering Guide
SUO 22 H 3 A 48 1 - 125.000M


Cage Code : 4GUT4

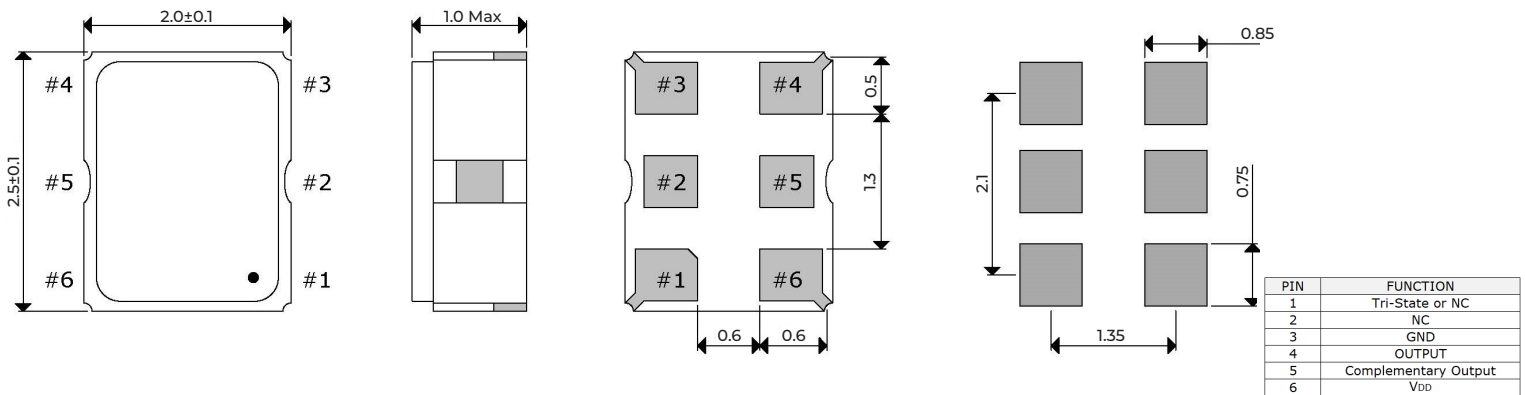
To customize your parameters, contact a Suntsu representative.

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

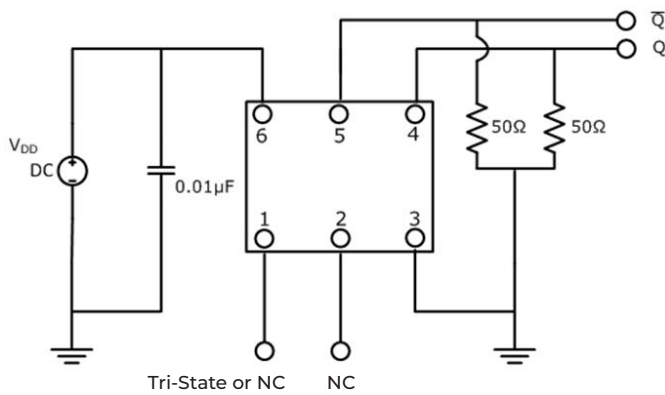
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	13.5		212.5	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change)	ppm	-20		20	See part numbering guide for options
Aging First Year	ppm	-3.0		3.0	
Operating Temperature	°C	-40		85	See part numbering guide for options
Storage Temperature	°C	-55		125	
Supply Voltage (V _{DD}) - 2.5V option	V	2.375	2.5	2.625	
Supply Voltage (V _{DD}) - 3.3V option	V	3.125	3.3	3.465	
Current (I _{DD}) - 2.5V option	mA			50	Connected to V _{DD} -2.0V
Current (I _{DD}) - 3.3V option	mA			50	
Output Load (HCSL)	Ω			50	
Output Logic Levels High (V _{OH})	mV	550		850	
Output Logic Levels Low (V _{OL})	mV	-150		150	
Rise (TR) and Fall (TF) Time	ns			0.5	
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			2	
Integrated Phase Jitter (12kHz ~ 20MHz)	ps		0.2	0.5	@100MHz
Phase Jitter (RMS)	ps		0.045	0.5	PCIe Gen 5.0, 32GHz

Outline Drawing & Land Pattern

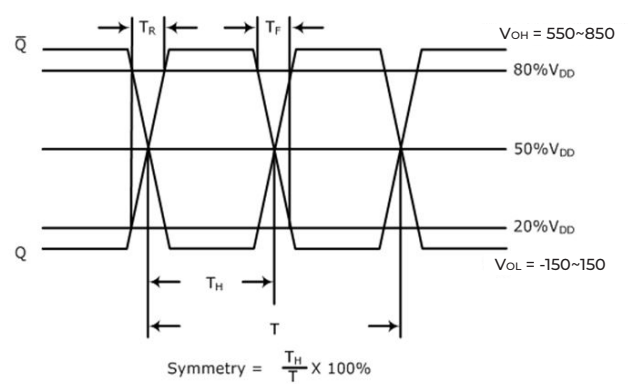
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



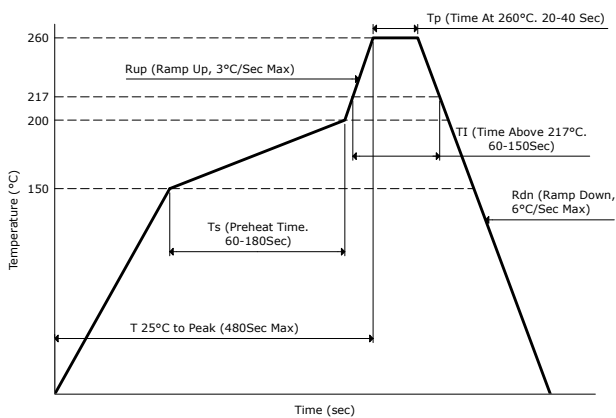
Test Circuit (HCSL)



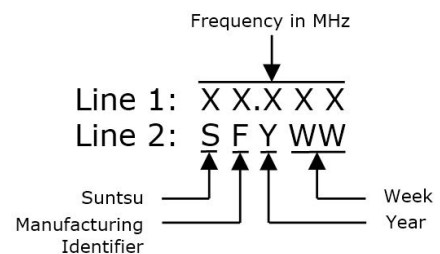
Waveform (HCSL)



Reflow Profile



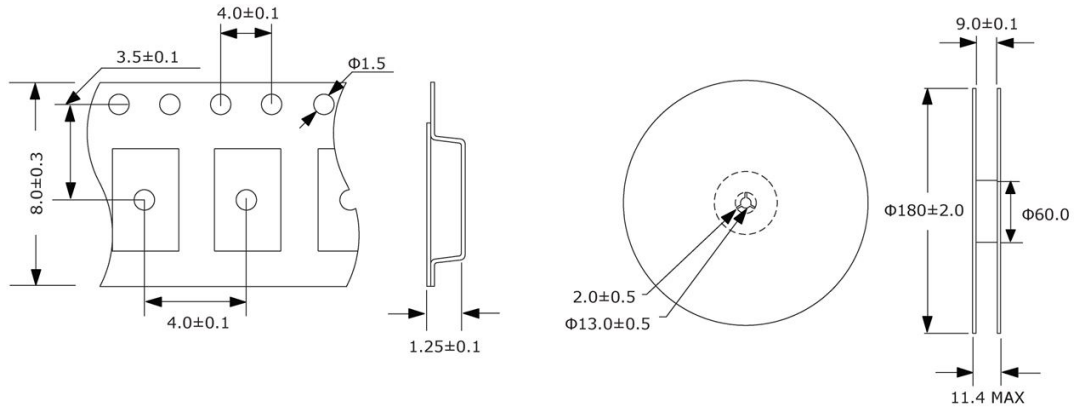
Part Marking



Tape And Reel Dimensions

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

3,000pcs/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