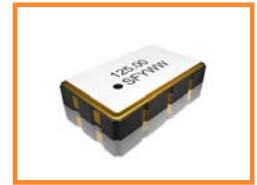


FEATURES	APPLICATIONS
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package HCSL RoHS Compliant Tape and Reel 	<ul style="list-style-type: none"> Fiber Channel Gigabit Ethernet PCI Express

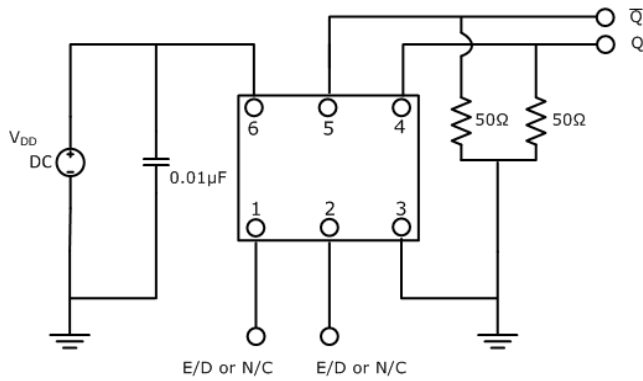


PART NUMBERING GUIDE	
<p>SUNTSU OSC → SXO 53 H 3 A 48 1 - 125.000M ← FREQUENCY (MHz)</p> <p>5.0mm x 3.5mm</p> <p>HCSL</p> <p>SUPPLY VOLTAGE 2: 2.5V±5% 3: 3.3V±5%</p> <p>FREQUENCY STABILITY A: ±50ppm B: ±30ppm C: ±25ppm *D: ±20ppm</p>	<p>TRI-STATE (ENABLE/ DISABLE) 1: Pin 1 2: Pin 2</p> <p>OPERATING TEMPERATURE RANGE 07: 0°C to + 70°C 16: -10°C to + 60°C 17: -10°C to + 70°C 27: -20°C to + 70°C 38: -30°C to + 85°C 48: -40°C to + 85°C</p>
<p>Cage Code: 4GUT4 To customize your parameters contact a Suntsu representative. * For frequency stability option D contact a Suntsu representative.</p>	

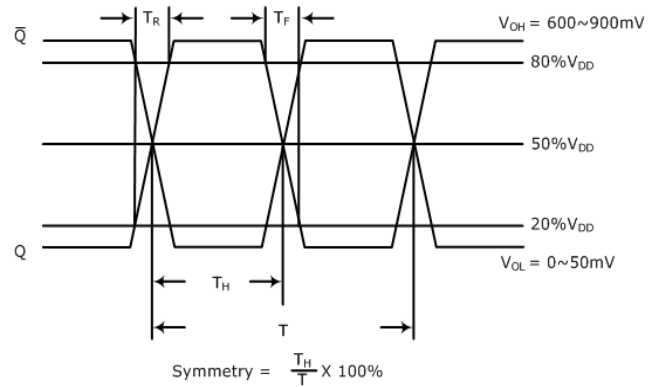
ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	100		125	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)		ppm	-20		+20	See part numbering guide for options.
Operating Temperature		°C	-40		+85	See part numbering guide for options.
Storage Temperature			-55		+125	
Supply Voltage (V _{DD})	2.5V Option	V	2.375	2.5	2.625	
	3.3V Option		3.135	3.3	3.465	
Current (I _{DD})	2.5V Option	mA			60	
	3.3V Option				80	
Output Load (HCSL)		Ω			50	
Output Logic Levels	Output Logic High (V _{OH})	mV	600		900	
	Output Logic Low (V _{OL})		0		50	
Rise (T _R) and Fall (T _F) Time		ns		0.4	0.7	
Symmetry (Duty Cycle)		%	45	50	55	
Tri-State Input Voltage	Enable	V	0.7*V _{DD}			No Connection.
	Disable				0.3*V _{DD}	
Start-Up Time		ms			10	
Phase Jitter (12kHz ~ 20MHz)		ps		0.5	1	

OUTLINE DRAWING															
	<p>RECOMMENDED LAND PATTERN</p>														
<p>NOTE: Dimensions in millimeters (mm).</p>	<table border="1"> <thead> <tr> <th>PIN</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>E/D or NC</td> </tr> <tr> <td>2</td> <td>E/D or NC</td> </tr> <tr> <td>3</td> <td>GND</td> </tr> <tr> <td>4</td> <td>OUTPUT</td> </tr> <tr> <td>5</td> <td>COMP OUTPUT</td> </tr> <tr> <td>6</td> <td>V_{DD}</td> </tr> </tbody> </table>	PIN	FUNCTION	1	E/D or NC	2	E/D or NC	3	GND	4	OUTPUT	5	COMP OUTPUT	6	V _{DD}
PIN	FUNCTION														
1	E/D or NC														
2	E/D or NC														
3	GND														
4	OUTPUT														
5	COMP OUTPUT														
6	V _{DD}														

TEST CIRCUIT (HCSL)

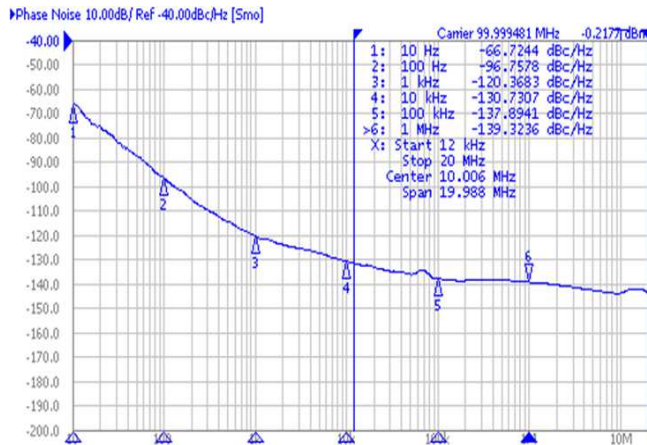


WAVEFORM (HCSL)

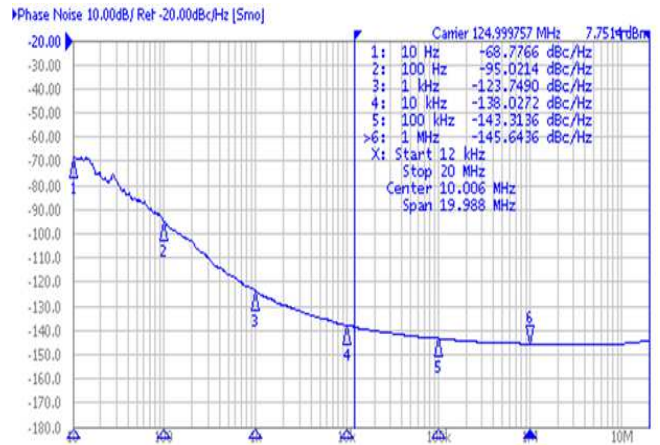


TYPICAL PHASE NOISE PERFORMANCE (MEASURED BY AGI LENT E5052A)

Frequency 100.000MHz

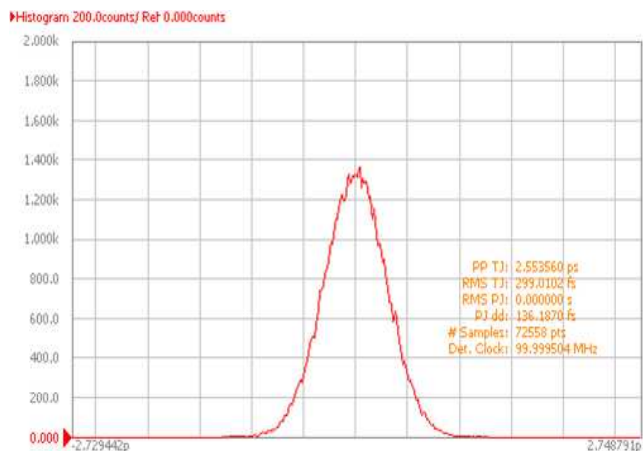


Frequency 125.000MHz

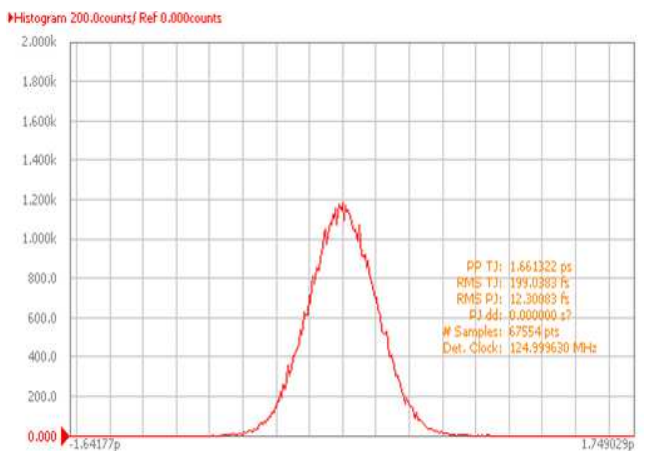


TYPICAL JITTER PERFORMANCE (MEASURED BY AGI LENT E5052A)

Frequency 100.000MHz



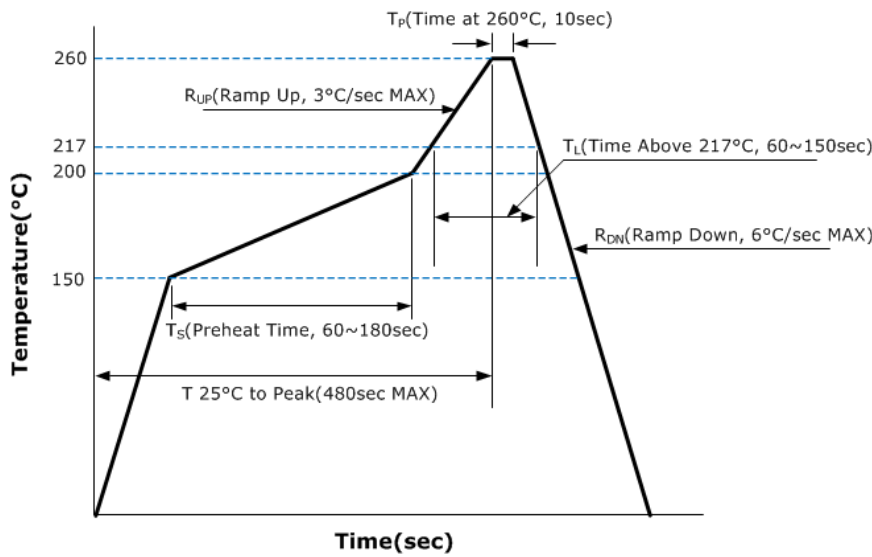
Frequency 125.000MHz



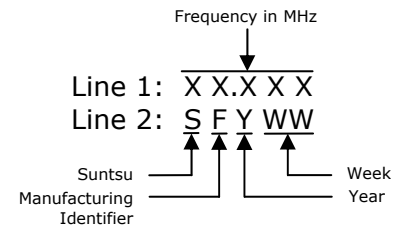
ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003

REFLOW PROFILE

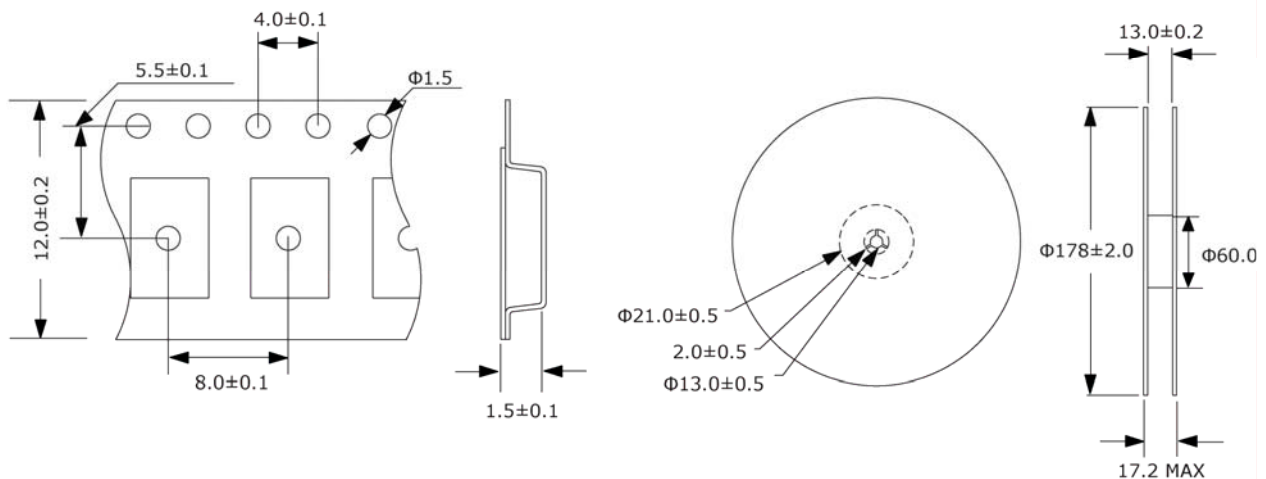


MARKING



TAPE AND REEL DIMENSIONS

1,000pcs/reel



NOTE: Dimensions in millimeters (mm); drawing is not to scale.