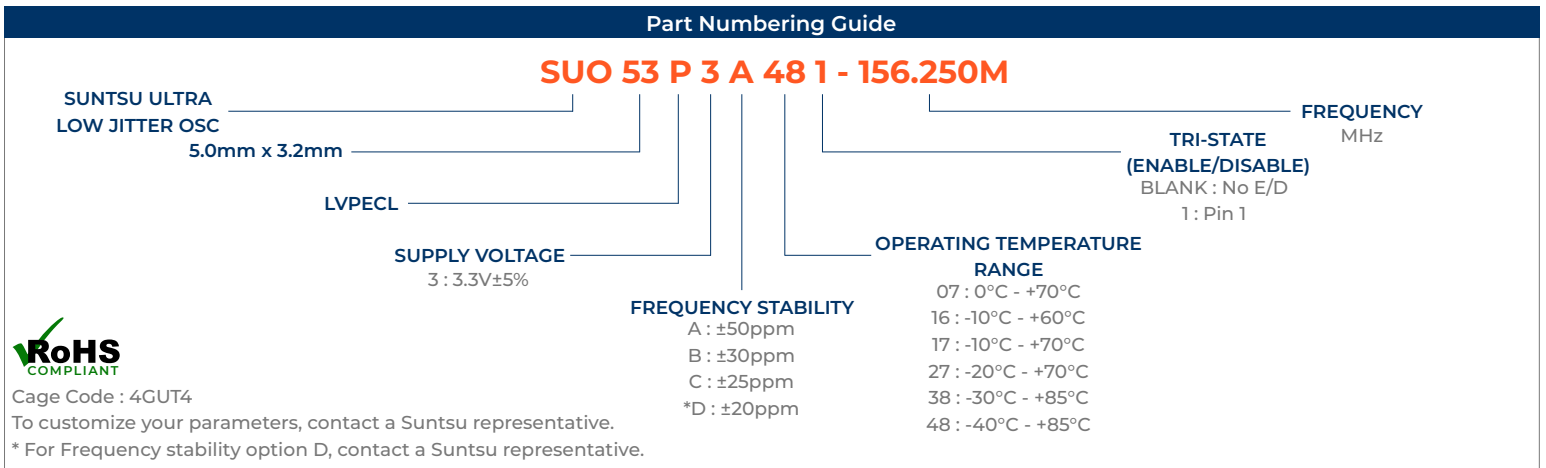
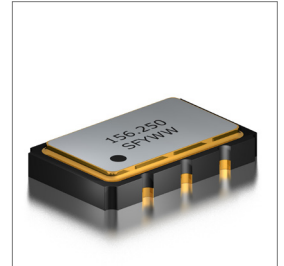


Features
<ul style="list-style-type: none"> ±20ppm (Frequency Stability) Available Ceramic Package LVPECL Ultra Low Phase Jitter Tape and Reel

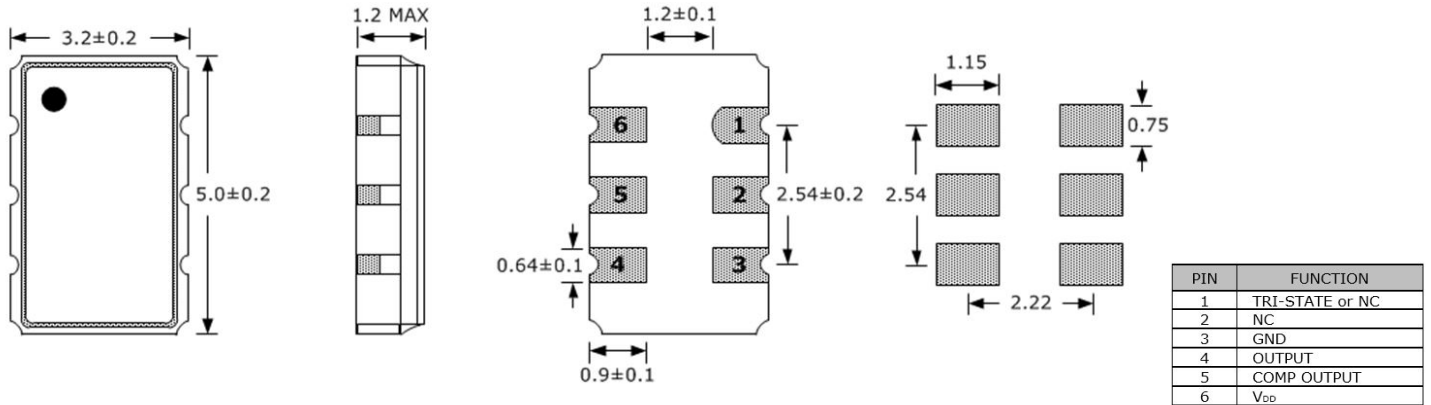
Applications
<ul style="list-style-type: none"> Fiber Channel Gigabit Ethernet PCI Express



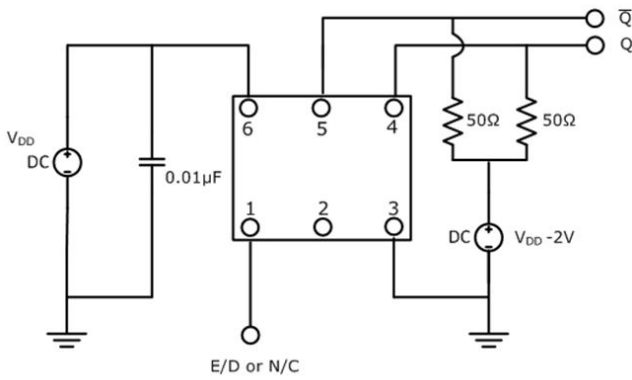
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	80		170	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and First Year Aging at 25°C.)	ppm	-20		+20	See part numbering guide for options
Operating Temperature	°C	-40		+85	See part numbering guide for options
Storage Temperature	°C	-55		+125	
Supply Voltage (V _{DD})	V	3.125	3.3	3.465	
Current (I _{DD})	mA			70	
Output Load (LVPECL)	Ω			50	50 Ω into V _{DD} -2.0V _{DC}
Output Logic Levels High (V _{OH})	V	2.215		2.420	
Output Logic Levels Low (V _{OL})	V	1.470		1.745	
Rise (TR) and Fall (TF) Time	ns		0.4	0.6	Measured at 20% to 80% of Waveform
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			5	
Phase Jitter (12kHz ~ 20MHz)	ps		0.077	0.1	150MHz - 170MHz
Phase Jitter (12kHz ~ 20MHz)	ps		0.13	0.2	80MHz - 149MHz

Outline Drawing & Land Pattern

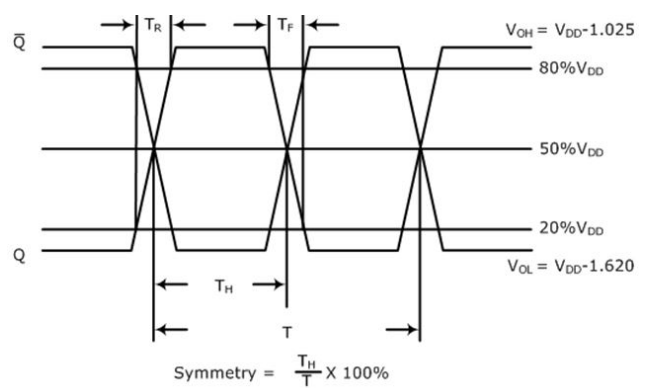
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



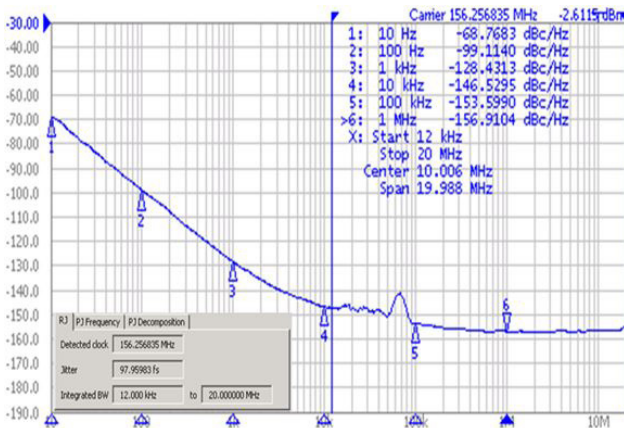
Test Circuit (LVPECL)



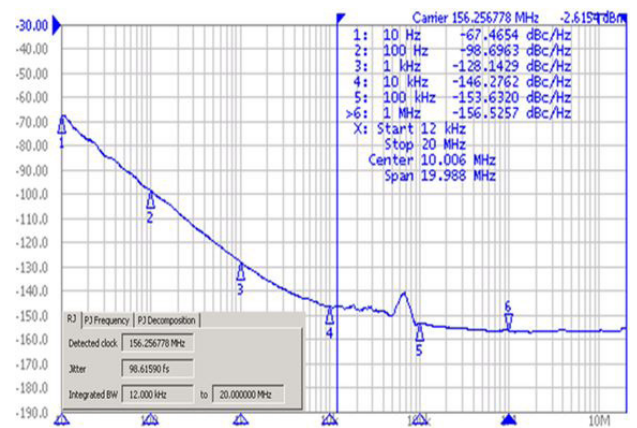
Waveform (LVPECL)



Typical Phase Noise Performance (Measured By Agilent E5052A)

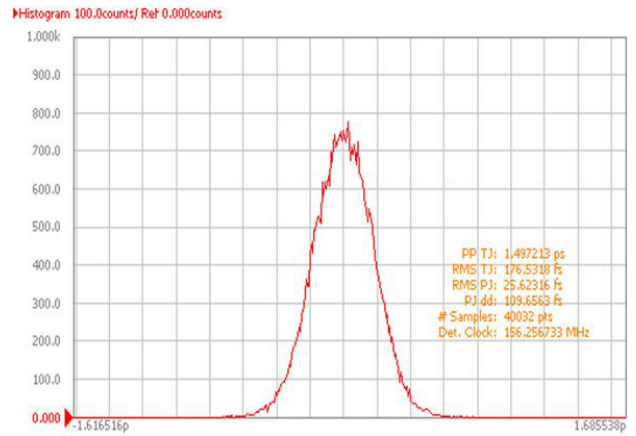
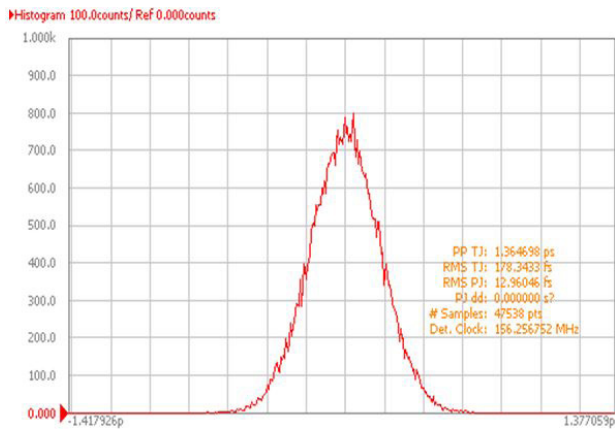


Frequency - 156.250MHz

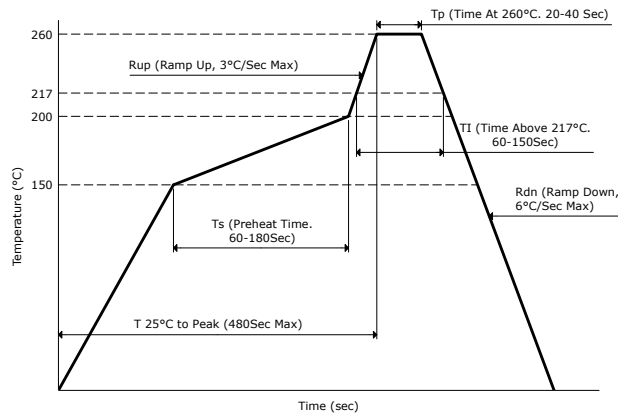


Frequency - 156.250MHz

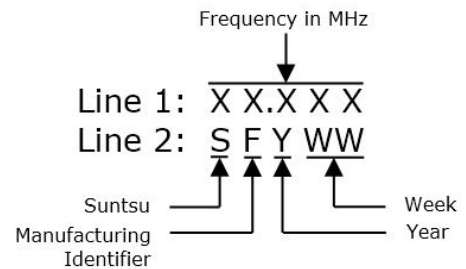
Typical Jitter Performance (Measured By Agilent E5052A)



Reflow Profile



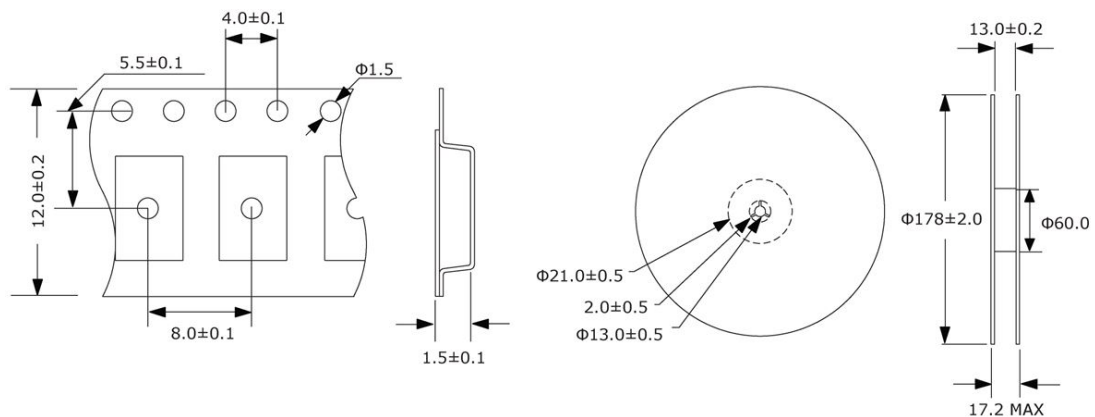
Part Marking



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