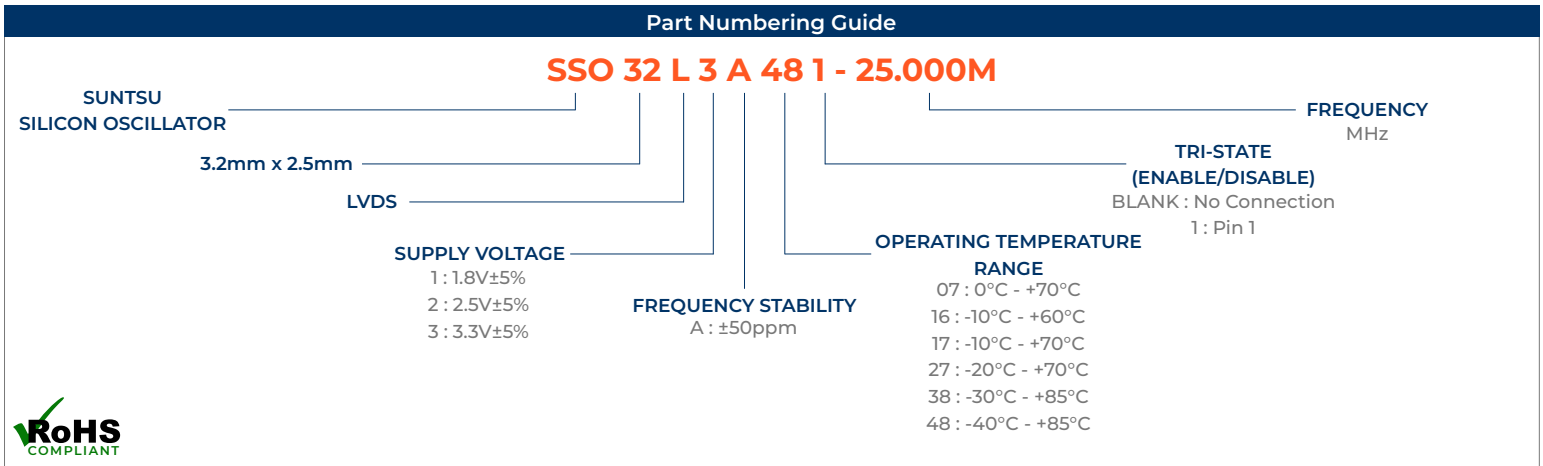
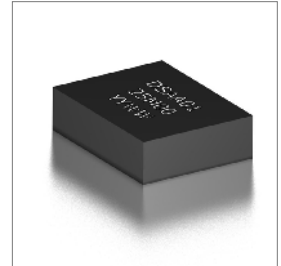


Features
• ± 50 ppm (Frequency Stability) Available
• All Silicon without Quartz and MEMS
• LVDS Output
• Low Jitter
• Built in LDO and Power Filter Circuit

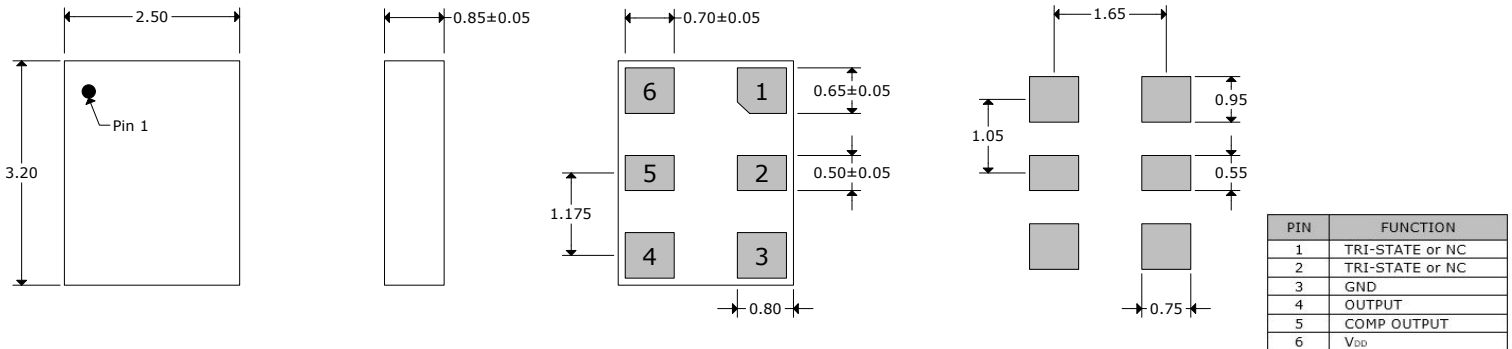
Applications
• Automotive Electronics
• Intelligent Terminal
• Ethernet
• Consumer Electronics
• Communication Equipment



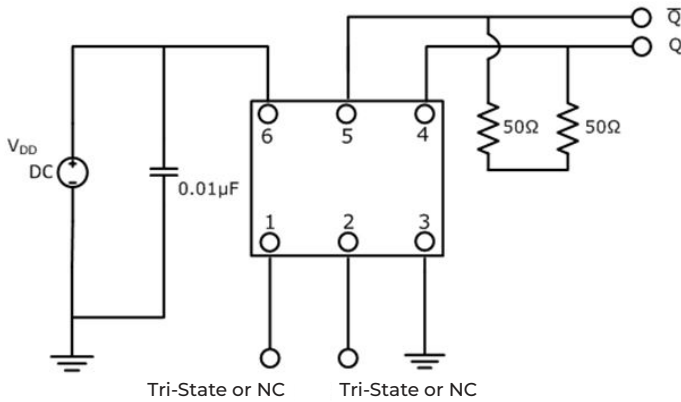
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	0.01		350	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and Ten Years Aging at 25°C.)	ppm	-50		50	
Operating Temperature	°C	-40		85	See part numbering guide for options
Storage Temperature	°C	-55		105	
Supply Voltage (V _{DD}) - 1.8V option	V	1.71	1.8	1.89	
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	3.47	
Current (I _{DD}) - 1.8V to 3.3V	mA		45	55	
Output Load (LVDS)	Ω			100	
Common Mode Voltage of Diff. Output (V _{oc})	V	0.795	0.85	0.905	1.8V Option
Common Mode Voltage of Diff. Output (V _{oc})	V	1.125	1.20	1.275	2.5V & 3.3V
Output Voltage Low	mV	0	5	10	
Differential Output Voltage (V _{OD})	V	0.5	0.82	0.96	
Differential Output Error (ρ V _{OD})	mV			50	
Offset Voltage (V _{OS})	V	1.125	1.250	1.375	
Offset Error (ρ V _{OS})	mV			50	
Rise (TR) and Fall (TF) Time	ps			350	
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			4	
Phase Jitter (12kHz ~ 20MHz)	fs		350	750	

Outline Drawing & Land Pattern

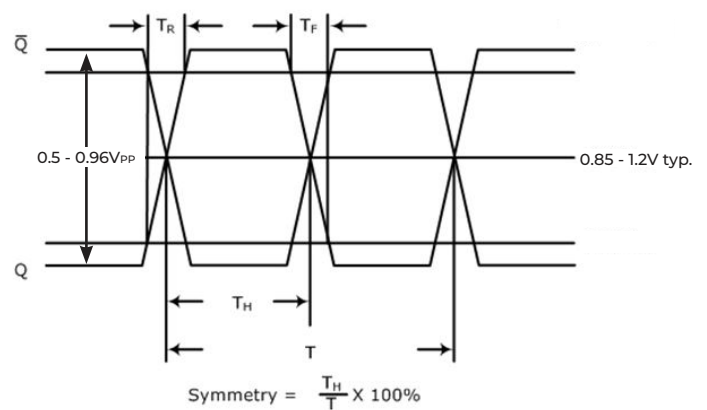
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



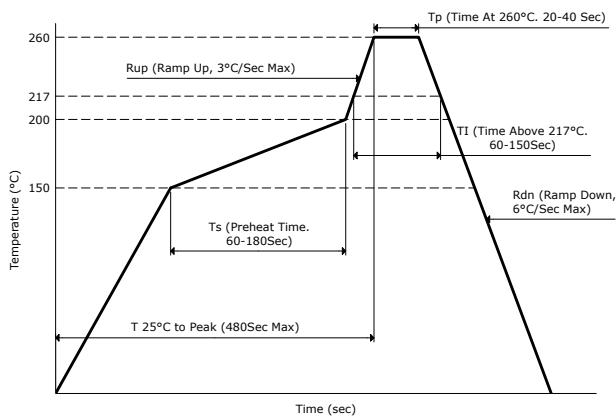
Test Circuit (LVDS)



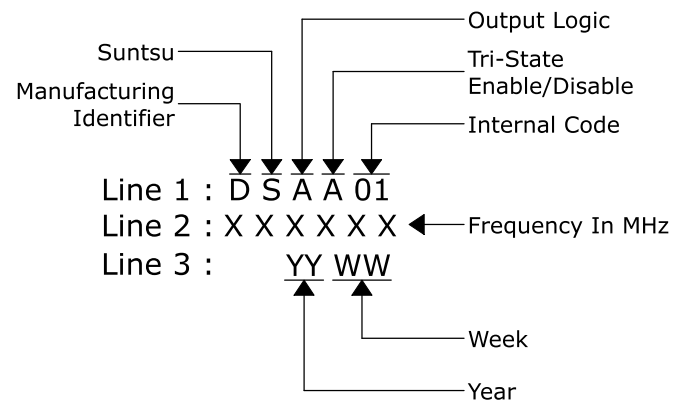
Waveform (LVDS)



Reflow Profile



Part Marking



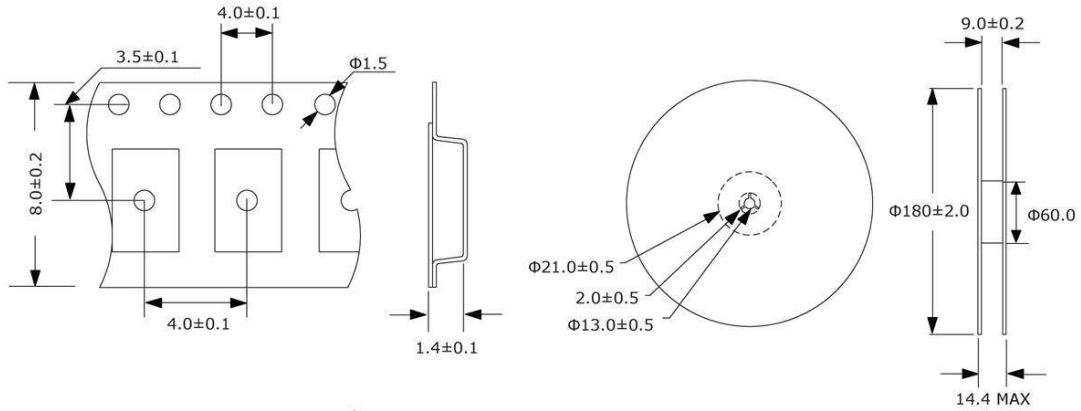
Six Character Frequency Info

MXXXXX	<1MHz
XMXXXX	≥1MHz; <10MHz
XXMXXX	≥10MHz; <100MHz
XXXMXX	≥100MHz; <350MHz

Tape And Reel Dimensions

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

3,000pcs/Reel



Environmental 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
Solderability	MIL-STD-883, Method 2003
Moisture Sensitivity	J-STD-020, MSL 1

Mechanical Specifications

Mechanical Shock	MIL-STD-202, Method 213, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Resistance to Solvents	MIL-STD-202, Method 215
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K