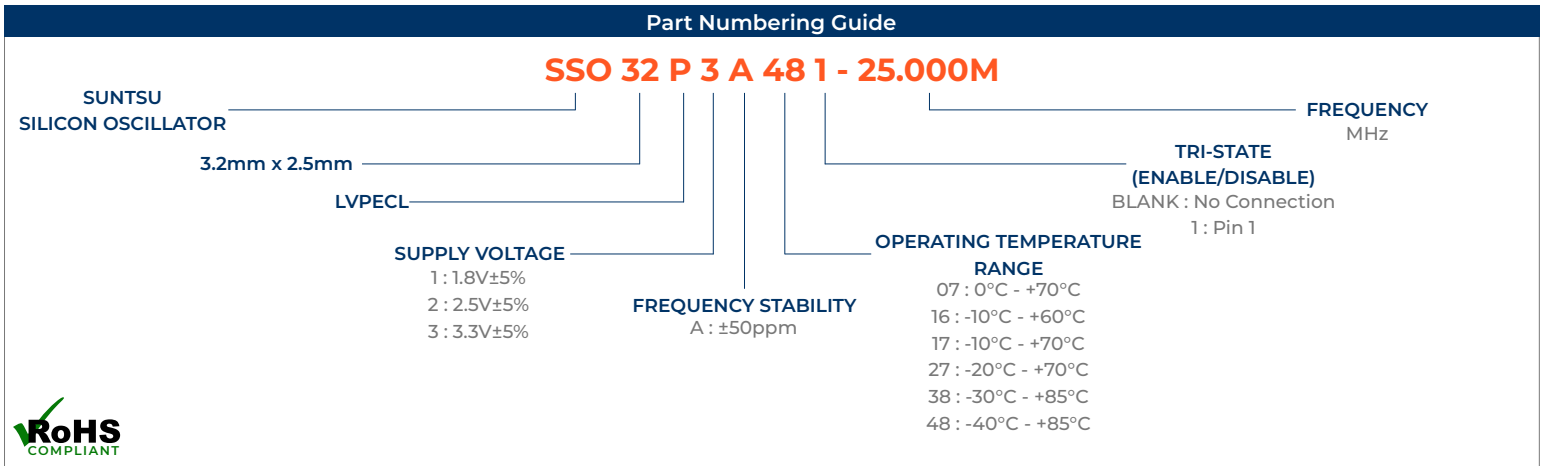
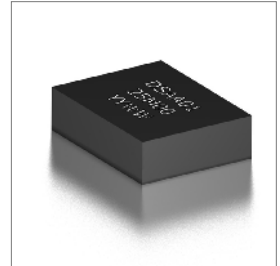


Features
• $\pm 50$ ppm (Frequency Stability) Available
• All Silicon without Quartz and MEMS
• LVPECL Output
• Low Jitter
• Built in LDO and Power Filter Circuit

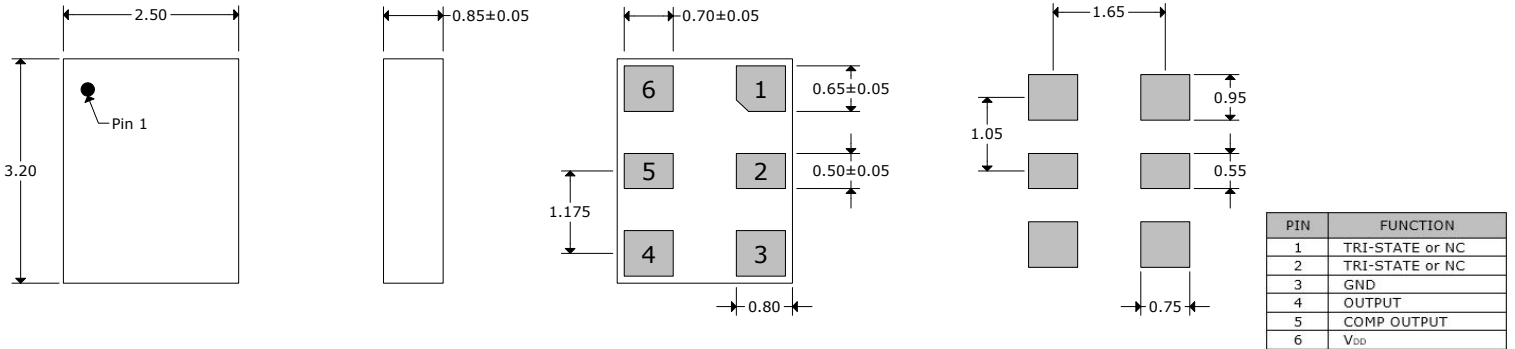
Applications
• Automotive Electronics
• Intelligent Terminal
• Ethernet
• Consumer Electronics
• Communication Equipment



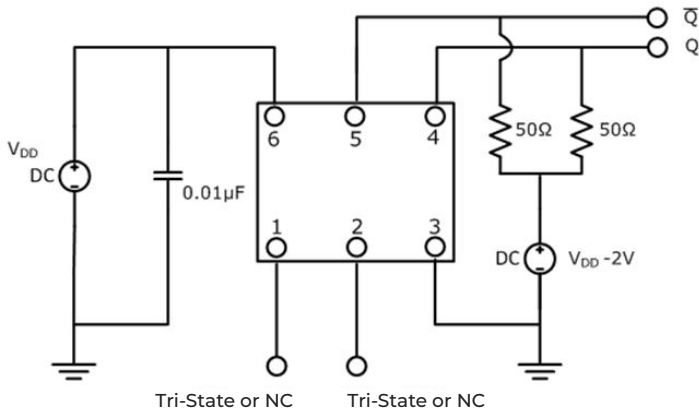
Electrical Parameters	Units	Minimum	Typical	Maximum	Remarks
Frequency Range	MHz	0.01		350	
Frequency Stability (Includes Initial Tolerance at 25°C, Frequency Stability over Operating Temperature, Output Load Change, Supply Voltage Change, and Ten Years Aging at 25°C.)	ppm	-50		50	
Operating Temperature	°C	-40		85	See part numbering guide for options
Storage Temperature	°C	-55		105	
Supply Voltage (V <sub>DD</sub> ) - 1.8V option	V	1.71	1.8	1.89	
Supply Voltage (V <sub>DD</sub> ) - 2.5V option	V	2.375	2.5	2.625	
Supply Voltage (V <sub>DD</sub> ) - 3.3V option	V	3.135	3.3	3.47	
Current (I <sub>DD</sub> ) - 1.8V to 3.3V	mA		60	70	
Output Load (LVPECL)	$\Omega$			50	50 $\Omega$ into V <sub>DD</sub> -2.0Vdc
Common Mode Voltage of Diff. Output (V <sub>oc</sub> )	V	V <sub>DD</sub> -1.55		V <sub>DD</sub> -1.25	
Differential Output Voltage (V <sub>od</sub> )	V <sub>PP</sub>	1.4		1.85	
Rise (TR) and Fall (TF) Time	ps			350	
Symmetry (Duty Cycle)	%	45	50	55	
Tri-State Input Voltage - Enable	V	0.7*V <sub>DD</sub>			No Connection
Tri-State Input Voltage - Disable	V			0.3*V <sub>DD</sub>	
Start-Up Time	ms			4	
Phase Jitter (12kHz ~ 20MHz)	fs		350	750	

Outline Drawing & Land Pattern

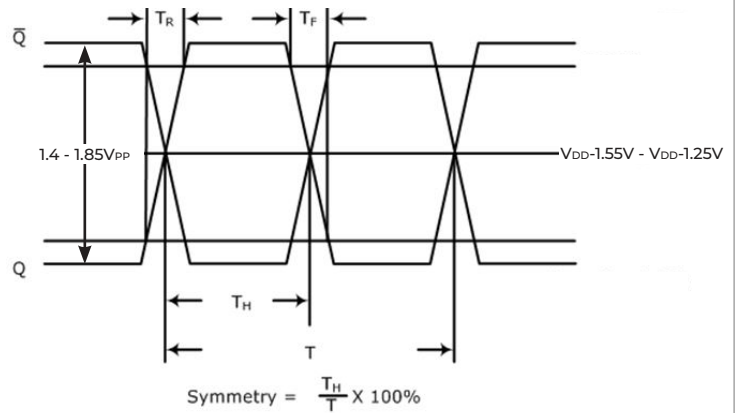
All dimensions are in millimeters (mm) unless otherwise noted. Drawings are not to scale.



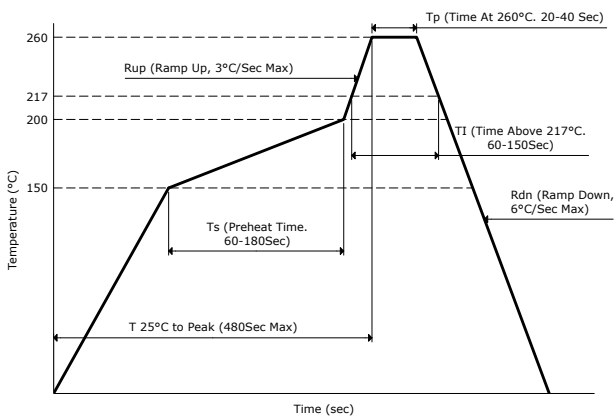
Test Circuit (LVPECL)



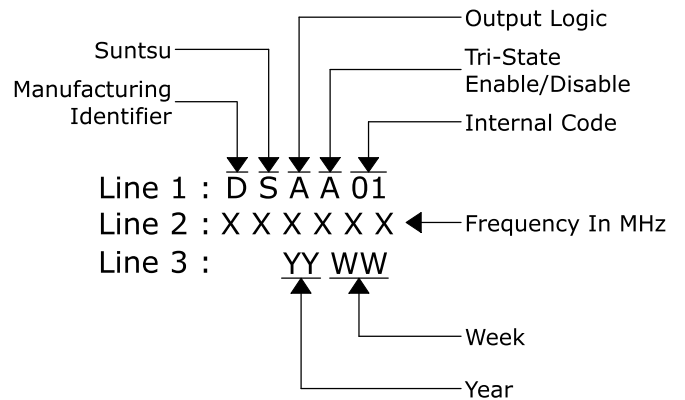
Waveform (LVPECL)



Reflow Profile



Part Marking



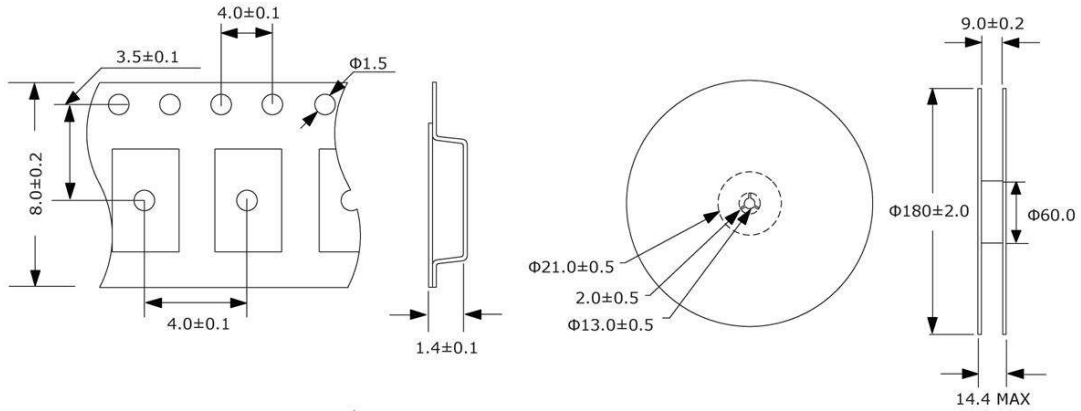
Six Character Frequency Info

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**

**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