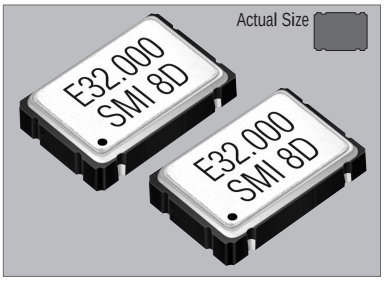
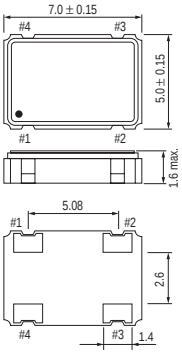
97SMOP FAMILY (ONE TIME FACTORY PROGRAMMABLE) STANDARD CLOCK OSCILLATORS

97SMOP

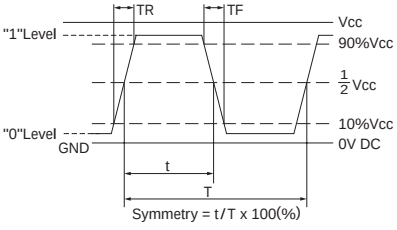


97SMOP

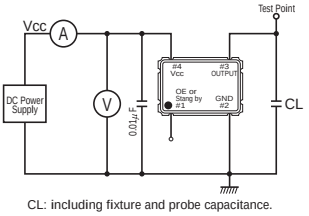


PIN	CONNECTION
1	OE or Stand by
2	GND
3	OUTPUT
4	Vcc

OUTPUT WAVEFORM

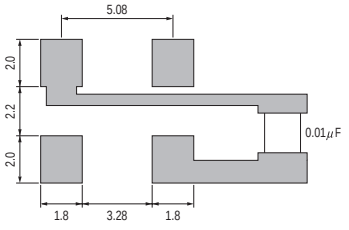


TEST CIRCUIT



CL: including fixture and probe capacitance.

SOLDERING PATTERN



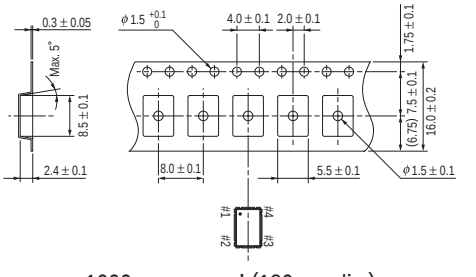
STANDARD SPECIFICATIONS

Part No.	97SMOP					
Frequency Range	1.000 MHz to 100.000 MHz		1.000 MHz to 125.000 MHz			
Frequency Stability (−10℃ to +70℃)	97SMOP(3VA) ····· ±100 ppm 97SMOP(3VB) ····· ±50 ppm over all conditions		97SMOP(E) ····· ±100 ppm 97SMOP(F) ····· ±50 ppm over all conditions		97SMOP(S) ····· ±100 ppm 97SMOP(T) ····· ±50 ppm over all conditions	
Frequency Stability (−40℃ to +85℃)	97SMOP(3VAW) ··· ±100 ppm over all conditions		97SMOP(EW) ····· ±100 ppm over all conditions		97SMOP(SW) ····· ±100 ppm over all conditions	
Operating Conditions Operating temperature	−10℃ to +70℃ (±100ppm & ±50ppm) / −40℃ to +85℃ (±100ppm)					
Input voltage (Vcc)	+3.3V DC ±0.3V		+5.0V DC ±0.5V			
	Control Voltage	SMI P/N	Control Voltage	SMI P/N	Control Voltage	SMI P/N
Tri-state control voltage	Vih: 0.5Vcc min. Vil : 0.2Vcc max.	97SMOP(3VA)TS 97SMOP(3VB)TS 97SMOP(3VAW)TS	Vih: 2.0V min. Vil : 0.8V max.	97SMOP(E)TS 97SMOP(F)TS 97SMOP(EW)TS	Vih: 2.0V min. Vil : 0.8V max.	97SMOP(S)TS 97SMOP(T)TS 97SMOP(TW)TS
	Control Voltage	SMI P/N	Control Voltage	SMI P/N	Control Voltage	SMI P/N
Stand-by control voltage	Vih: 0.5Vcc min. Vil : 0.2Vcc max.	97SMOP(3VA)SB 97SMOP(3VB)SB 97SMOP(3VAW)SB	Vih: 2.0V min. Vil : 0.8V max.	97SMOP(E)SB 97SMOP(F)SB 97SMOP(EW)SB	Vih: 2.0V min. Vil : 0.8V max.	97SMOP(S)SB 97SMOP(T)SB 97SMOP(SW)SB
Absolute Max. Rating Supply voltage Storage Temperature	−0.5V to +7.0V −55℃ to +125℃					
Input Current	25 mA max.		45 mA max.			
Disable Current	15 mA max.		30 mA max.			
Stand-by Current	20 μA max.		50 μA max.			
Output Symmetry	50% ±10% at 50%Vcc level				50% ±10% at 1.4V level	
Rise and fall times	4 ns max. (20%Vcc to 80%Vcc level)				4 ns max. (0.4V to 2.4V level)	
"0" Level "1" Level	Vol : 0.4V max. Voh : Vcc−0.4V min.				Vol : 0.4V max. Voh : 2.4V min.	
Load	15 pF max.		25 pF max.		5 TTL max.	
Enable/Disable/Stand-by Phase Delay Time	100 ns max.					
Start-up Time	10 ms max.					
Reflow Soldering Conditions	+240℃ ±5℃ for 10 seconds +150℃ ±10℃ for 1 to 2 minutes (preheating)					

PACKAGE DATA

Item / Package	97SMOP
LID	Metal
BASE	Ceramic
SEALING	Seam−weld
TERMINAL PLATING	Gold

TAPE SPECIFICATIONS



1000pcs. per reel (180mm dia.)