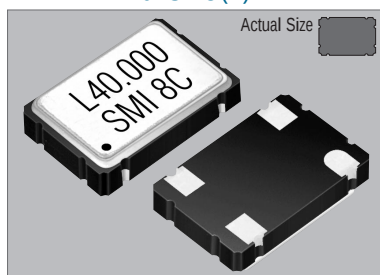
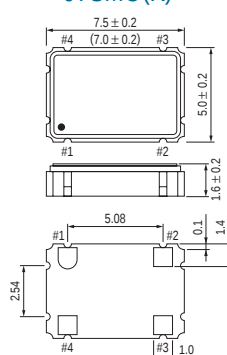


97SMO(K)



97SMO(K)



OSC WITHOUT TRI-STATE

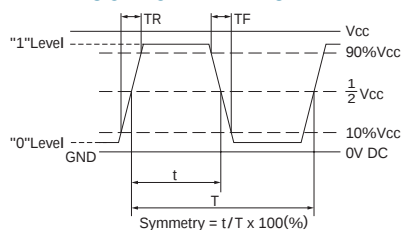
PIN	CONNECTION
1	N.C.
2	GND
3	OUTPUT
4	Vcc

OSC WITH TRI-STATE

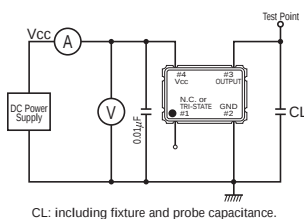
PIN	CONNECTION
1	"L" : "H" or OPEN
2	GND
3	Z : OUTPUT
4	Vcc

Z : high impedance

OUTPUT WAVEFORM



TEST CIRCUIT



CL: including fixture and probe capacitance.

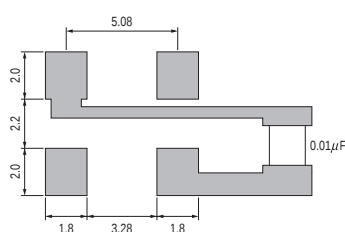
STANDARD SPECIFICATIONS

Part No.	97SMO(K)		
Frequency Range	1.800 MHz to 100.000 MHz		1.800 MHz to 36.000 MHz
Frequency Stability	97SMO(K3VG)..... ± 100 ppm	97SMO(K3VL)..... ± 100 ppm	97SMO(KP)..... ± 100 ppm
	97SMO(K3VH)..... ± 50 ppm	97SMO(K3VM)..... ± 50 ppm	
	97SMO(K3VJ)..... ± 30 ppm	97SMO(K3VN) ± 30 ppm	
	over all conditions		over all conditions
Operating Conditions			
Operating temperature	-10°C to +70°C		
Storage temperature	-55°C to +125°C		
Input voltage (Vcc)	+3.0V DC $\pm 10\%$ or +3.3V DC $\pm 10\%$		+3.0V $\pm 10\%$ to +5.0V $\pm 10\%$ (multi voltage compatible)
Tri-state control voltage	NO TRI-STATE	Pin#1 = Open → Pin#3 = Output Pin#1 = +2.2V min. → Pin#3 = Output Pin#1 = +0.8V max. → Pin#3 = High Impedance	
Input Current	15 mA max. (1.800 MHz to 36.000 MHz) 25 mA max. (36.00 MHz to 70.000 MHz) 40 mA max. (70.00 MHz to 100.000 MHz)		25 mA max.
Output (-10°C to +70°C)			
Symmetry	97SMO (K3VG) / (K3VH) / (K3VJ) / (K3VL) / (K3VM) / (K3VN) / (KP) 50% $\pm 10\%$ at 50%Vcc 97SMO (K3VG)D / (K3VH)D / (K3VJ)D / (K3VL)D / (K3VM)D / (K3VN)D / (KP)D 50% $\pm 5\%$ at 50%Vcc		
Rise and fall times	5 ns max.		10 ns max.
"0" Level	10%Vcc max.		
"1" Level	90%Vcc min.		
Load	15 pF max.		30 pF max.
Start-up Time (max.)	5 ms (1.800 MHz to 36.000 MHz) 10 ms (36.00 MHz to 70.000 MHz) 15 ms (70.00 MHz to 100.000 MHz)		
Enable / Disable Phase delay time	NO TRI-STATE	100 ns max.	
Output Current	8 mA min. ("0" level) 8 mA min. ("1" level)		8 mA min. ("0" level) at +3.3V 8 mA min. ("1" level) at +3.3V 16 mA min. ("0" level) at +5V 16 mA min. ("1" level) at +5V
Reflow Soldering Conditions	+240°C $\pm 5^{\circ}\text{C}$ for 10 seconds +150°C $\pm 10^{\circ}\text{C}$ for 1 to 2 minutes (preheating)		

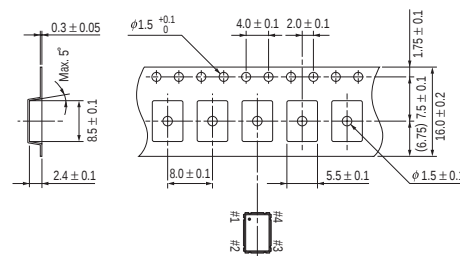
PACKAGE DATA

Item	Package	97SMO(K)
LID		Metal
BASE		Ceramic
SEALING		Seam-weld
TERMINAL PLATING		Gold

SOLDERING PATTERN



TAPE SPECIFICATIONS



1000pcs. per reel (180mm dia.)