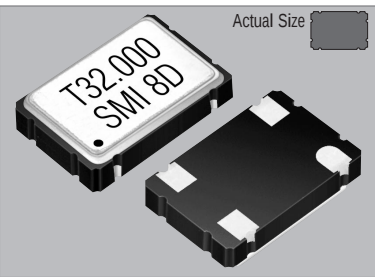
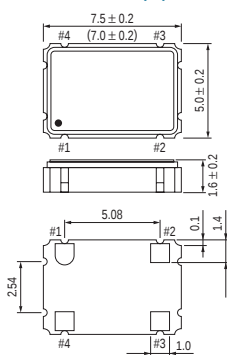


97SMO (K)



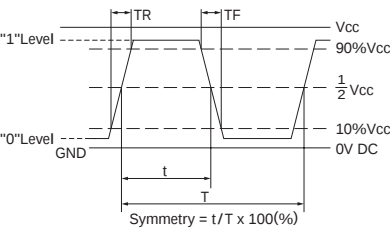
97SMO(K)



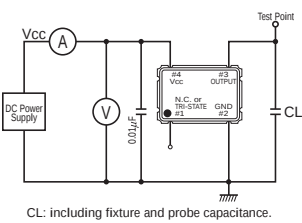
OSC WITHOUT TRI-STATE		OSC WITH TRI-STATE	
PIN	CONNECTION	PIN	CONNECTION
1	N.C.	1	"L" : "H" or OPEN
2	GND	2	GND
3	OUTPUT	3	Z : OUTPUT
4	Vcc	4	Vcc

Z : high impedance

OUTPUT WAVEFORM



TEST CIRCUIT



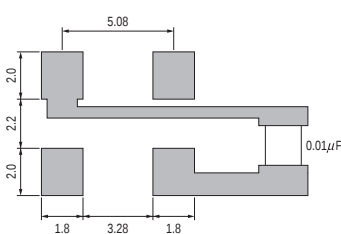
STANDARD SPECIFICATIONS

Part No.	97SMO(K)			
Frequency Range	1.800 MHz to 100.000 MHz		1.800 MHz to 70.000 MHz	
Frequency Stability	97SMO(KA)..... ± 100 ppm	97SMO(KE)..... ± 100 ppm	97SMO(KS)..... ± 100 ppm	97SMO(KX)..... ± 100 ppm
	97SMO(KB)..... ± 50 ppm	97SMO(KF)..... ± 50 ppm	97SMO(KT)..... ± 50 ppm	97SMO(KY)..... ± 50 ppm
	97SMO(KC)..... ± 30 ppm	97SMO(KG)..... ± 30 ppm	97SMO(KU)..... ± 30 ppm	97SMO(KZ)..... ± 30 ppm
	over all conditions	over all conditions	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)	+5V DC $\pm 10\%$			
Tri-state control voltage	NO TRI-STATE	Pin#1 = Open →#3=Output	NO TRI-STATE	Pin#1 = Open →#3=Output
		Pin#1 = +2.2V min.→#3=Output		Pin#1 = +2.2V min.→#3=Output
		Pin#1 = +0.8V max.→#3=High -Impedance		Pin#1 = +0.8Vmax. →#3=High -Impedance
Input Current	20 mA max. (1.800 MHz to 36.000 MHz)		30 mA max. (1.800 MHz to 36.000 MHz)	
	55 mA max. (36.00 MHz to 70.000 MHz)		65 mA max. (36.00 MHz to 70.000 MHz)	
	70 mA max. (70.00 MHz to 100.000 MHz)			
Output (-10°C to +70°C)				
Symmetry	97SMO (KA) / (KB) / (KC) / (KE) / (KF) / (KG) / (KS) / (KT) / (KU) / (KX) / (KY) / (KZ) 50% $\pm 10\%$ at 50%Vcc 97SMO (KA)D / (KB)D / (KC)D / (KE)D / (KF)D / (KG)D / (KS)D / (KT)D / (KU)D / (KX)D / (KY)D / (KZ)D 50% $\pm 5\%$ at 50%Vcc			
Rise and fall times	15 ns max. (1.800 MHz to 70.000 MHz) 5 ns max. (70.00 MHz to 100.000 MHz)		7 ns max.	
"0" Level	10%Vcc max.			
"1" Level	90%Vcc min.			
Load	30 pF max.		50 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.	NO TRI-STATE	100 ns max.
Output Current	4 mA min. ("0" level)		16 mA min. ("0" level)	
	4 mA min. ("1" level)		16 mA min. ("1" level)	
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)			

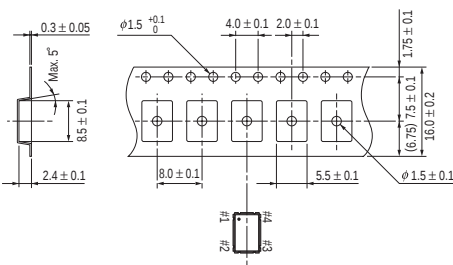
PACKAGE DATA

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

SOLDERING PATTERN



TAPE SPECIFICATIONS



1000pcs. per reel (180mm dia.)