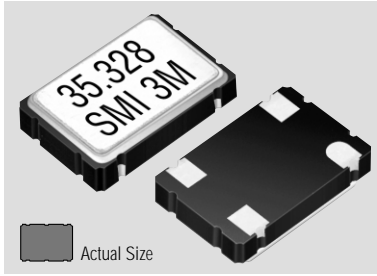
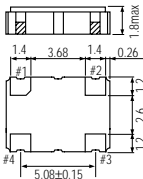
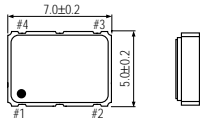


### 97SMOV

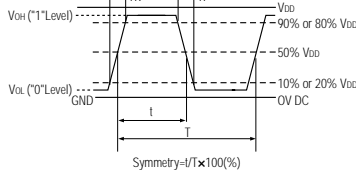


### 97SMOV

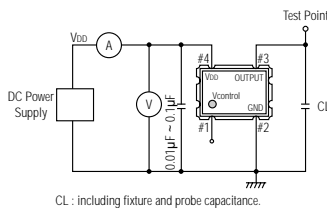


PIN	CONNECTION
1	V <sub>control</sub>
2	GND
3	Output
4	V <sub>DD</sub>

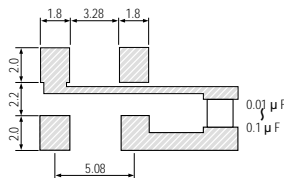
### OUTPUT WAVEFORM



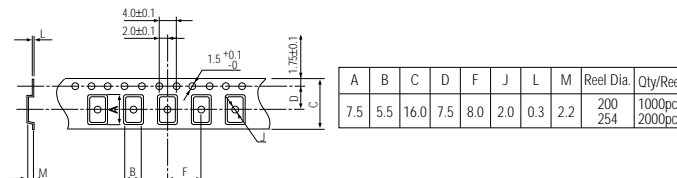
### TEST CIRCUIT



### SOLDERING PATTERN



### TAPE SPECIFICATIONS



## STANDARD SPECIFICATIONS

Item	Specifications	
Generic part number	97SMOV(3.3V)	97SMOV(5V)
Frequency range	3.000 MHz to 36.000 MHz	
Frequency stability (-10°C to +70°C) over all conditions	97SMOV(3.3VA) ..... ± 50 ppm 97SMOV(3.3VB) ..... ± 30 ppm 97SMOV(3.3VC) ..... ± 25 ppm Vcon = +1.65V	97SMOV(5VA) ..... ± 50 ppm 97SMOV(5VB) ..... ± 30 ppm 97SMOV(5VC) ..... ± 25 ppm Vcon = +2.5V
Frequency pulling range	± 90 ppm min. at Vcon = +1.65V ± 1.65V	± 100 ppm min. at Vcon = +2.5V ± 2.0V
Frequency change vs. input voltage	± 5.0 ppm max. (VDD = +3.3V DC ± 5%)	± 5.0 ppm max. (VDD = +5V DC ± 0.5V)
Operating Conditions		
Operating temperature	-10°C to +70°C (standard) -40°C to +85°C (W)	
Storage temperature	-50°C to +95°C	
Input voltage (VDD)	+3.3V DC ± 5%	+5V DC ± 0.5V
Control voltage (Vcon)	+1.65V DC ± 1.65V	+2.5V DC ± 2.0V
Input current (+25°C)	11 mA max. (no load)	30 mA max. (no load)
Output (-10°C to +70°C)		
Symmetry	45% to 55% at 50%VDD level	
Rise and fall times	5 ns max. (20%VDD to 80%VDD level)	
"0" level	VOL : 10%VDD max.	
"1" level	VOH : 90%VDD min.	
Load	30 pF max. (CMOS)	
Startup time	10 ms max.	
Aging	± 5 ppm max. at +25°C ± 3°C for first year	
Frequency linearity	± 15% max.	± 10% max.
Frequency slope	Positive	
Modulation bandwidth	10 kHz min. (-3 dB)	
SSB phase noise	-120 dBc/Hz max. at 1kHz offset	
Reflow soldering condition	+ 230°C ± 5°C for 10 seconds + 150°C ± 10°C for 1 to 2 minutes (preheating)	

## PACKAGE DATA

Item	Package	97SMOV
Lid		Metal
Base		Ceramic
Sealing		Seam
Terminal plating		Gold