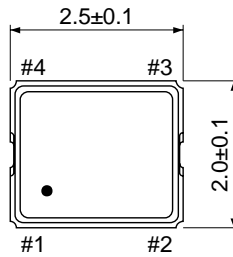
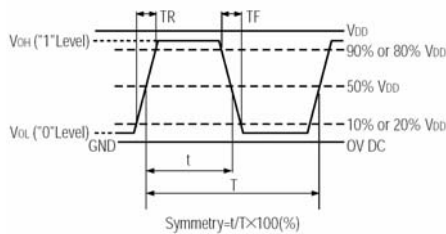
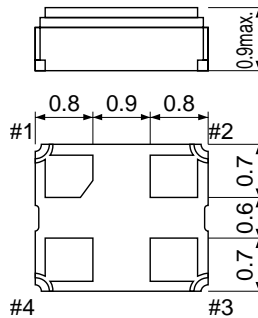
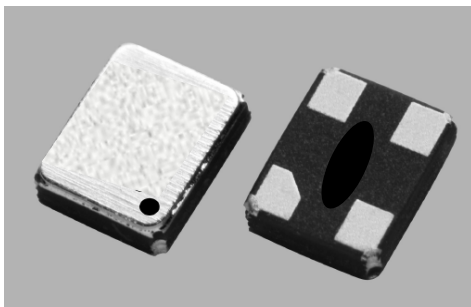


- 1. Part No. : 22SMODO
- 2. Nominal frequency : Output 1: 1.0000 MHz to 52.0000 MHz(Blank Frequency)  
Output 2: 13.0000 MHz to 52.0000 MHz(1/1 or 1/2 Divider Frequency)
- 3. Frequency stability :  $\pm 25\text{ppm}$ ,  $\pm 30\text{ppm}$ ,  $\pm 50\text{ppm}$  or  $\pm 100\text{ppm}$  over all conditions
- 4. Operating Conditions
  - Operating temperature :  $-20^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$   
 $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C(W)}$
  - Storage temperature :  $-55^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$
  - Input voltage ( $V_{DD}$ ) :  $+1.8\text{V}$  to  $+3.3\text{V DC } \pm 10\%$
- 5. Input current : 4 mA, Typ. at  $F=27\text{MHz}$ ,  $V_{DD}=+3.3\text{V}$ ,  $CL=15\text{pF}$
- 6. Output ( $-20^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$ )
  - Symmetry : 40% to 60% at  $1/2 V_{DD}$  level
  - Rise and fall times : 10 ns max. ( $10\%V_{DD}$  to  $90\%V_{DD}$  level)
  - "0" level :  $10\%V_{DD}$  max. ( $V_{OL}$ )
  - "1" level :  $90\%V_{DD}$  min. ( $V_{OH}$ )
  - Output load : CMOS  $15\text{pF}$  max.
- 7. Start-up time : 10 ms max.
- 8. Aging :  $\pm 5\text{ppm}$  max. at  $+25^{\circ}\text{C } \pm 3^{\circ}\text{C}$  for first year
- 9. Reflow soldering condition :  $+250^{\circ}\text{C } \pm 10^{\circ}\text{C}$  for 10 seconds (reflow soldering)  
 $+170^{\circ}\text{C } \pm 10^{\circ}\text{C}$  for 1 to 2 minutes (preheating)
- 10. Outline dimensions : See below

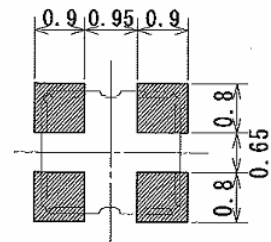


<b>22SMODO</b>
<b>RoHS compliant(Pb-FREE)</b>

PIN	CONNECTION
1	OUTPUT 2
2	GND
3	OUTPUT 1
4	$V_{DD}$



Example of a Terminal Land Pattern



mm

ISSUED		CHECKED		APPROVAL	
	Umi Yagisawa				
<b>SMI</b>	ITEM. <b>DUAL OUTPUT</b> <b>CRYSTAL CLOCK OSCILLATORS</b>			No. <b>SO-9936C</b>	