

Oscillator (5.0X3.2) SMD Type



Application of Crystal

- ▶ PLL circuit
- ▶ Broad casting equipment
- ▶ AFC circuit
- ▶ Sonet/SDH.ATM
- ▶ FM modulator



Features

- ▶ High reliability for low cost
- ▶ Low-priced SMD-clock-oscillator
- ▶ Frequency stability from ± 20 to ± 50 ppm available
- ▶ Supply voltage of 1.8, 2.5, 2.8, 3.3 and 5.0 VDC deliverable
- ▶ Extended temperature range -40°C to $+105^{\circ}\text{C}$
- ▶ Rohs compliant / Pb free



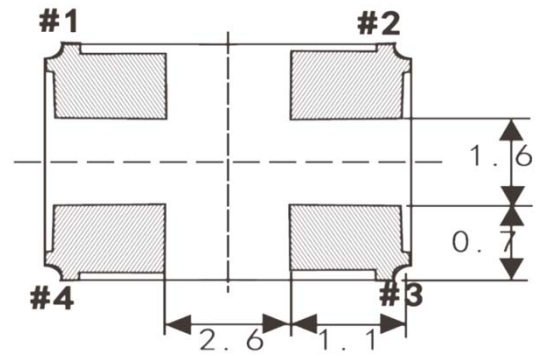
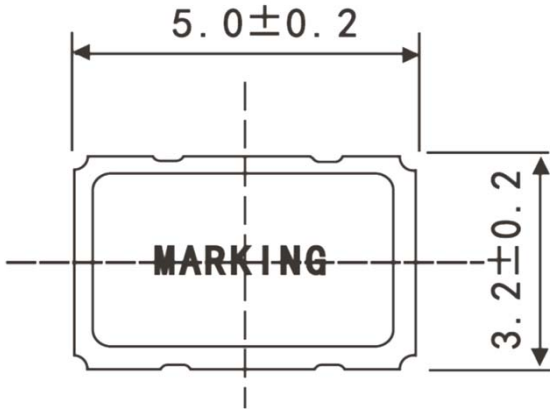
Electrical Specification

PARAMETERS	CONDITIONS	CHARACTERISTICS		UNITS
Output Logic	-	HCMOS / TTL Output		-
Input Voltage (Vdd)	-	3.3 $\pm 10\%$ (typ.) , 5.0 $\pm 10\%$ (typ.) , Others Avail.		VDC
Frequency Range (fO)	-	1 ~ 200.00		MHz
Operating Temperature (TOPR)	-	0 ~ +70 (Std.) / -40 ~ 85 (Option)		$^{\circ}\text{C}$
Storage Temperature (TSTG)	-	-55 ~ +125		$^{\circ}\text{C}$
Frequency Stability	a + b + c + d	$\pm 20, \pm 25, \pm 50, \pm 100$ max.		PPM
	(a) Frequency Tolerance	Inclusive of Overall Stability		-
	(b) Temperature Stability	Inclusive of Overall Stability (Operating Temperature)		-
	(c) Input Voltage Stability	Inclusive of Overall Stability (Vdd $\pm 5\%$)		-
	(d) Load Stability	Inclusive of Overall Stability (RL $\pm 5\%$)		-
Current Consumption	-	10 ~ 45 (35) max.	15 ~ 85 (50) max.	mA
Aging	@ 25 $^{\circ}\text{C}$	± 5 max.		PPM/Y
Rise Time (TR) / Fall Time (TF)	≤ 23.999 MHz	10 max.		nS
	24.00 ~ 70.00 MHz	6 max.		
	70.001 ~ 125.00 MHz	4 max.		
PIN 1 Tri-State Input Voltage (Option)	-	Vh (Pin 1) No Connection : Enables Output		-
	-	Vh (Vih) ≥ 2.2 Vdc : Enables Output		
	-	Vl (Vil) ≤ 0.8 Vdc : Disables Output (High Impedance)		
Output Voltage High "1" VOH	TTL Load	2.4 min.		VDC
	HCMOS Load	Vdd * 0.9 min.		

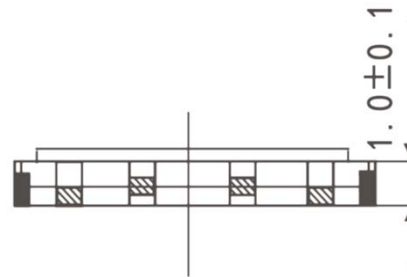
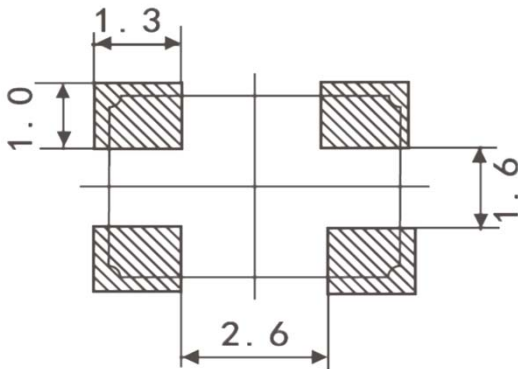
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Dimensions (mm):



Solder pad layout



PIN NO	CONNECTION
# 1	OE
# 2	GND
# 3	OUTPUT
# 4	+Vdd