

DIP QUARTZ CRYSTAL OSCILLATOR



4 Pin Version 13.08×13.08 mm

- ± 20 ppm type available
- Excellent Reliability Performance



RoHS compliant

★ PARAMETERS

PARAMETERS	SPECIFICATION		
Frequency Range	0.4~200MHz, 32.768KHz		
Supply voltage	1.8V、3.3V、5.0V		
Input Current		TTL	CMOS
	0.5MHz ~ 24.999MHz	25mA max	20mA max
	25MHz ~ 99.999MHz	40mA max	40mA max
	100MHz ~ 200MHz	60mA max	60mA max
Frequency Stability Overall	$\pm 20\text{ppm} \sim \pm 100\text{ppm}$		
Operating Temp. Range	$-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$ to $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$		
Storage Temp. Range	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$		
Output Load	CMOS or TTL (15pF/1-10TTL)		
Symmetry	45% ~ 55% typ. (40% ~ 60% max.) at $0.5 \times V_{dc}$		
Start-up time	10mS max		
Rise & Fall Time	10nS max		
Aging	$\pm 5\text{ppm max/Year}$		

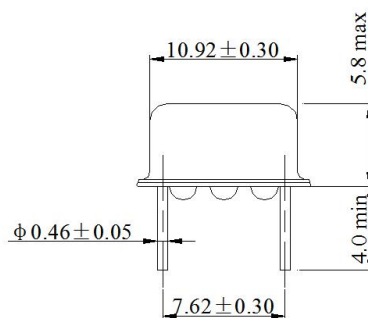
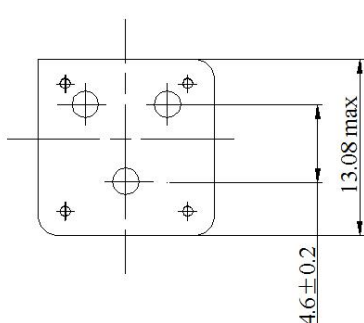
⊙ All specification subject change without notice

★ FREQUENCY STABILITY VS. TEMPERATURE

Operation Temperature Range	Frequency Stability			
	$\pm 20\text{ppm}$	$\pm 25\text{ppm}$	$\pm 30\text{ppm}$	$\pm 50\text{ppm}$
$-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$	○	●	○	○
$-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$	○	○	●	○
$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$				●

● standard ○ available

★ DIMENSIONS& LAND PATTERN LAYOUT (Unit: mm)



Pin	Connection
1	Tri-state or no connect
2	GND
3	Output
4	V _{DC}

★ PART NUMBER GUIDE *e.g. FXO12.000M3.3H-50D (*H=Half Size, DIP8)*

Logo	Quartz Crystal Oscillator	Frequency Hz	Supply voltage V	Package	Frequency Stability ppm	Operating Temp. Range
F	XO	12.000M	3.3	H	50	D

Definition	Description
Operating Temperature Range	A: -10~+60℃
	B: -20~+70℃
	C: -30~+80℃
	D: -40~+85℃
	E: Customer specified

★ WAVE SOLDERING PROFILE

