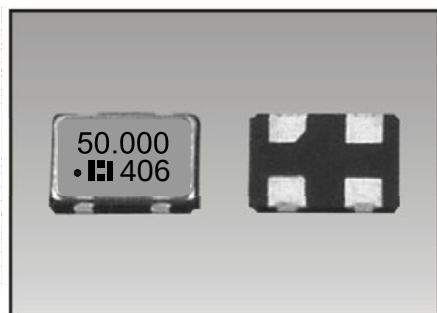


• HXO-5 Series

5.0X3.2X1.3 mm

FEATURES

- 5X3.2X1.3 Miniature Package
- Tri-State Enable/Disable
- TTL/HCMOS compatible
- Tape and Reel
- IR Re-flow
- 5.0V, 3.3V, 2.8V and 1.8V Option



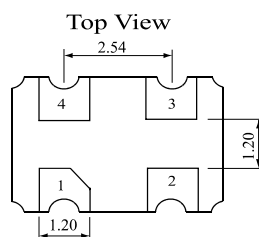
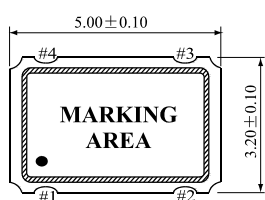
The HXO-5 series is an ultra miniature package clock oscillator with size of 5.0X3.2X1.3mm. It is mainly used in portable PC and telecommunication devices and equipment.

Electrical Specifications

Parameter		Condition	HXO-53	HXO-56	HXO-59	HXO-57
Frequency Range	F0		1MHz~100MHz	1MHz~133MHz		
Frequency Stability*		All Condition	±25ppm, ±50ppm, ±100ppm			
Operating Temperature Range	T _{OPR}		-20℃~+70℃(-40℃~+85℃ option)			
Storage Temperature Range	T _{STG}		-55℃~+125℃			
Power supply Voltage	V _{DD}		5.0V+/-10%	3.3V+/-10%	2.8V+/-10%	1.8V+/-10%
Supply Current	I _{DD}	1MHz to 9.999MHz	15mA Max	8mA Max	7mA Max	6mA Max
		10MHz to 34.999MHz	20mA Max	10mA Max	8mA Max	7mA Max
		35MHz to 49.999MHz	35mA Max	25mA Max	20mA Max	15mA Max
		50MHz to133.000MHz	40mA Max	35mA Max	30mA Max	25mA Max
Output Symmetry	Sym	At 1/2V _{DD}	40/60%(45/55% Option)			
Rise time	T _r	10%V _{DD} ~90%V _{DD}	5 nS Max	5 nS Max	6 nS Max	7 nS Max
Fall Time	T _f	90%V _{DD} ~10%V _{DD}	5 nS Max	5 nS Max	6 nS Max	7 nS Max
Output Voltage	V _{OH}		90% V _{DD} Min			
	V _{OL}		10% V _{DD} Max			
Output Load	HCMOS Load		15pF Typ.			
Start Time	T _s		10mS Max			
Stand-by Function			Yes			
Aging(First Year)		25℃±3℃	±2ppm Max			
Pin 1,tri-state function			Pin 1=H or open....Output active at pin 3			
			Pin 1=L.....high impedance at pin 3			
Packing Unit		1000pcs/reel				

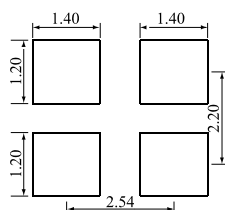
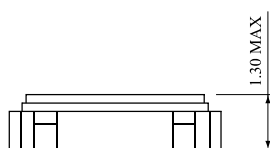
*Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

Mechanical Dimensions(mm)



Pin	Connection
#1	Tri-State
#2	GND
#3	Output
#4	V _{DD}

Recommended Solder Pattern



**Note: A 0.01uF bypass capacitor should be placed between V_{DD}(Pin4) and GND(Pin2) to Minimize power supply line noise