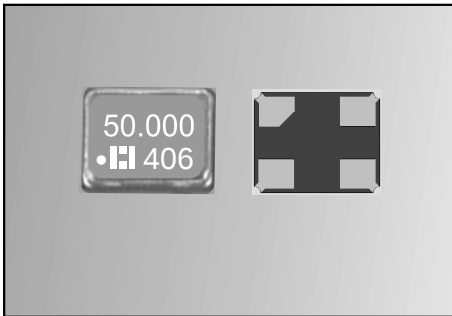


• HXO-S Series

3.2X2.5X1.2 mm



FEATURES

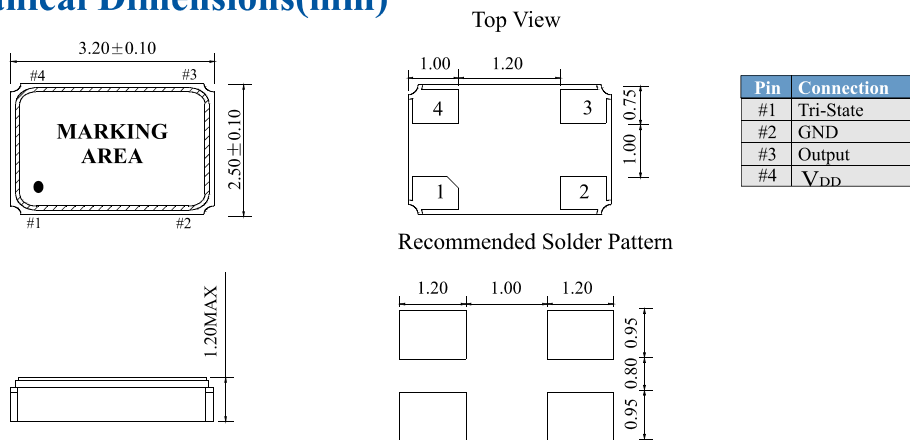
- The HXO-S series is an ultra miniature package clock oscillator with size of 3.2X2.5X1.2mm. It is mainly used in portable PC and telecommunication devices and equipment.
- 3.2X2.5X1.2 Miniature Package
- Tri-State Enable/Disable
- TTL/HCMOS compatible
- Tape and Reel
- IR Re-flow
- 5.0V,3.3V,2.8V and 1.8V option

Electrical Specifications

Parameter	Condition	HXO-SF	HXO-SC	HXO-SD	HXO-SE
Frequency Range	F0	1MHz~54MHz			
Frequency Stability*	All Condition	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$			
Operating Temperature Range	T _{OPR}	-20°C~+70°C (-40°C~+85°C option)			
Storage Temperature Range	T _{STG}	-55°C~+125°C			
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
		10MHz to 34.999MHz	20mA Max	10mA Max	8mA Max
		35MHz to 49.999MHz	35mA Max	25mA Max	20mA Max
		50MHz to 54.000MHz	40mA Max	35mA Max	30mA Max
Output Symmetry	Sym	At 1/2V _{DD}			
Rise time	T _r	10%V _{DD} ~90%V _{DD}	5 nS Max	5 nS Max	6 nS Max
Fall Time	T _f	90%V _{DD} ~10%V _{DD}	5 nS Max	5 nS Max	6 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°C ±3°C	$\pm 2\text{ppm}$ 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		3000pcs/reel			

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

Mechanical Dimensions(mm)



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