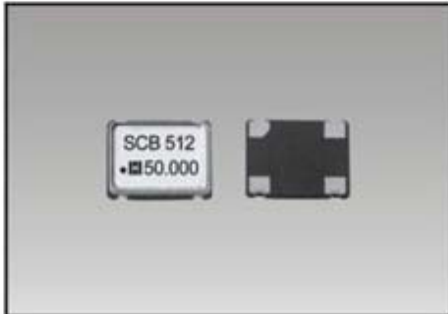




# SURFACE MOUNT OSCILLATOR

## • HXO-SC&SD&SE Series 3.2X2.5X1.2 mm



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.

### FEATURES

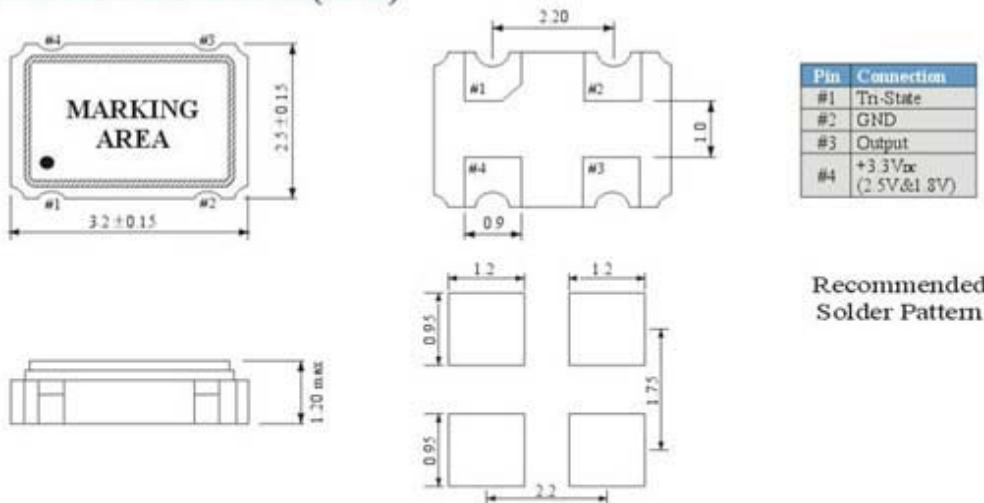
- 3.2X2.5X1.2 Miniature Package
- Tri-State Enable/Disable
- TTL/HCMOS compatible
- Tape and Reel
- IR Re-flow
- 3.3V Input Voltage
- 2.5V&1.8V Option

### Electrical Specifications

Parameter	Condition	HXO-SC	HXO-SD	HXO-SE	
Frequency Range	F <sub>0</sub>	1.544MHz~80MHz		1.544MHz~70MHz	
Frequency Stability*	All Condition*	±25ppm, ±50ppm, ±100ppm			
Operating Temperature Range	T <sub>OPR</sub>	0°C~70°C (-40°C~+85°C option)			
Storage Temperature Range	T <sub>STG</sub>	-55°C~+125°C			
Power supply Voltage	V <sub>DD</sub>	3.3V+/-10%	2.5V+/-10%	1.8V+/-10%	
Aging(First Year)	25°C ±3°C	±5ppm			
Supply Current	I <sub>DD</sub>	1.544MHz to 9.999MHz	8mA Max	7mA Max	6mA Max
		10.000MHz to 34.999MHz	10mA Max	8mA Max	7mA Max
		35.000MHz to 49.999MHz	25mA Max	20mA Max	15mA Max
		50.000MHz to 80.000MHz	35mA Max	30mA Max	25mA Max
Output Symmetry	Sym	At 1/2V <sub>DD</sub> 40/60%(45/55% Option)			
Rise time	T <sub>r</sub>	10%V <sub>DD</sub> ~90%V <sub>DD</sub>	7 nS Max	6 nS Max	5 nS Max
Fall Time	T <sub>f</sub>	90%V <sub>DD</sub> ~10%V <sub>DD</sub>	7 nS Max	6 nS Max	5 nS Max
Output Voltage	V <sub>OH</sub>	90% V <sub>DD</sub> min			
	V <sub>OL</sub>	10% V <sub>DD</sub> max			
Output Load	HCMOS Load	15pF Max			
Start-up Time	T <sub>s</sub>	10mS Max			
Pin 1,tri-state function		Pin 1=H or open....Output active at pin 3 Pin 1=L.....high impedance at pin 3			

\*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<sub>DD</sub>(Pin4) and GND(Pin2) to Minimize power supply line noise