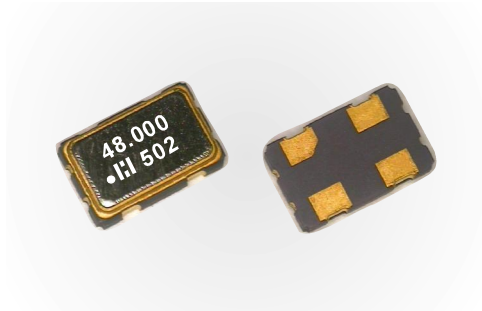




# SMD CRYSTAL OSCILLATOR



## • D5SX Series 5.0\*3.2 OSC



### FEATURES

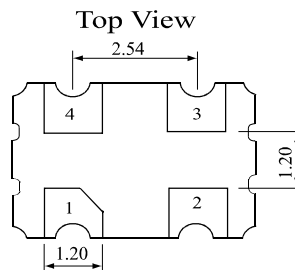
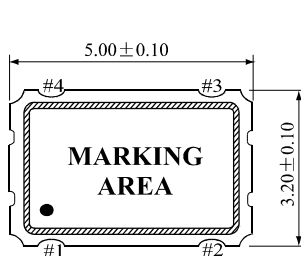
- 5X3.2X1.3 Miniature Package
- Tri-State Enable/Disable
- TTL/HCMOS compatible
- Home security devices, networking, and base station applications
- 5.0V, 3.3V, 2.8V(2.5V), 1.8V option

## Electrical Specifications

Parameter	Condition	D5SX				
Frequency Range	F <sub>0</sub>	1~100MHz	1~156.25MHz			
Frequency Stability*	All Condition	± 25ppm, ± 50ppm, ± 100ppm				
Operating Temperature Range	T <sub>OPR</sub>	-20°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>	5.0V+/-10%	3.3V+/-10%	2.8V+/-10%	1.8V+/-10%	
Supply Current	I <sub>DD</sub>	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 to 156.25MHz	40mA Max	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>	5 nS Max	5 nS Max	6 nS Max	7 nS Max
Fall Time	T <sub>f</sub>	90%V <sub>DD</sub> ~10%V <sub>DD</sub>	5 nS Max	5 nS Max	6 nS Max	7 nS Max
Output Voltage	V <sub>OH</sub> V <sub>OL</sub>		90% V <sub>DD</sub> Min 10% V <sub>DD</sub> Max			
Output Load	HCMOS Load		15pF Typ.			
Start Time	T <sub>s</sub>		10mS Max			
Stand-by Function			Yes			
Aging(First Year)	25°C ±3°C		± 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			

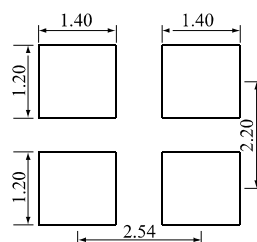
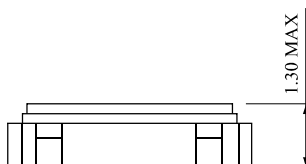
\*Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration

## Mechanical Dimensions(mm)



Pin	Connection
#1	Tri-State
#2	GND
#3	Output
#4	V <sub>DD</sub>

### Recommended Solder Pattern



\*\*Note: A 0.01uF bypass capacitor should be placed between V<sub>DD</sub>(Pin4) and GND(Pin2) to Minimize power supply line noise