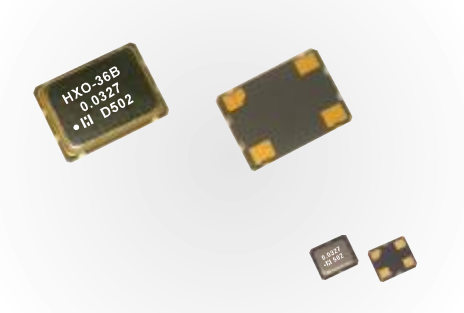
SMD CRYSTAL OSCILLATOR

• DxSX Series RTC (32.768KHz OSC)



FEATURES

- 32.768KHz
- Tri-State Enable/Disable
- TTL/CMOS compatible
- Tape and Reel
- Low current consumption
- 3.3V,2.5V and 1.8V option
- RF power saving application on portable devices

Electrical Specifications

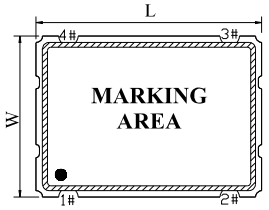
Parameter		Condition	D2SX/D3SX/D5SX/D7SX		
Frequency Range	F0		32.768KHz		
Frequency Stability*		All Condition	±15ppm, ±25ppm, ±50ppm		
Operating Temperature Range	T_{OPR}		-20℃~+70℃(-40℃~+85℃ option)		
Storage Temperature Range	T_{STG}		-55℃~+125℃		
Power supply Voltage	V_{DD}		3.3V±10%	2.5V±10%	1.8V±10%
Supply Current	I_{DD}		30uA Max		
Output Symmetry	Sym	At 1/2V_{DD}	40/60%(45/55% Option)		
Rise time	T_r	10%V_{DD}~90%V_{DD}	30nS Max		
Fall Time	T_f	90%V_{DD}~10%V_{DD}	30nS Max		
Output Voltage	V_{OH}		90%V_{DD} Min		
	V_{OL}		10%V_{DD} Max		
Output Load HCMOS Load	CL		15pF Max		
Start Time	Ts		10mS Max		
Aging(First Year)			±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(HXO-D3x/5x)		
			3000pcs/reel(HXO-DSx/Nx)		

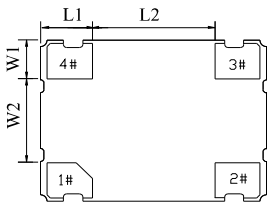
**Include: 25℃ tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration*

***Please contact us for inquiries regarding other frequency*

Mechanical Dimensions(mm)

Top View



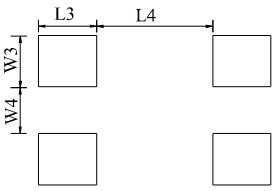


Offset:0.1mm

Product	L	W	H(Max.)	L1	L2	L3	L4	W1	W2	W3	W4
D7SX	7.00	5.00	1.50	1.60	3.80	1.80	3.60	1.20	2.60	1.60	2.00
D5SX	5.00	3.20	1.30	1.83	1.34	1.40	1.14	1.00	1.20	1.20	1.00
D3SX	3.20	2.50	1.20	1.00	1.20	1.20	1.00	0.75	1.00	0.95	0.80
D2SX	2.50	2.00	0.90	0.80	0.90	1.00	0.70	0.70	0.60	0.90	0.40

Recommended Solder Pattern





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

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