



# 3.2 x 1.5 x 0.9mm 4 Pad SMD

32.768kHz

# **DESCRIPTION**

- Temperature Compensated Oscillator
- Industrial Operating Range
- 3.2x1.5x0.9mm Watch Crystal Package
- CMOS Output



# **SPECIFICATION**

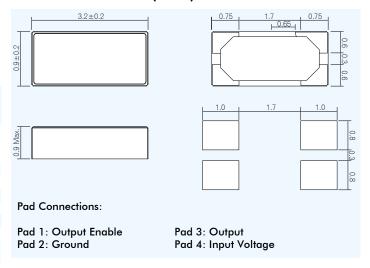
Frequency:	32.768kHz	
Output Logic:	CMOS	
Frequency Stability:	See table	
Frequency Tolerance:	$\pm 3$ ppm max. ( $\pm 25$ °C, Vdd = 3.3V)	
Operating Temp Range:	-40° to +85°C	
Input Voltage:	+1.5VDC or +3.63VDC †	
Output Voltage		
High '1':	90% Vdd max.	
Low '0':	10% Vdd min.	
Stand-by Control Voltage		
High:	80% Vdd max.	
Low:	20% Vdd min.	
Load:	CMOS 30pF max.	
Rise/Fall Times:	40nsec max. (10% to 90% Vdd)	
Symmetry:	40% to 60% at 1/2Vdd	
Current Consumption:	1.3μA typ., 2.5μA max.	
Stand-by Current:	2.5μA max.	
Storage Temperature:	-40°C to +105°C	
Frequency Voltage Coefficient:	±1ppm/V max.	
	(Vdd = +1.5V  to  +3.63V)	
Start-up Time:	0.5sec. Max. (+25°C, 3.3V)	
Aging:	±3ppm max. (+25°C, 3.3V, first year)	

 $\dagger$  Supply Voltage (Vdd) should be set to 0V for 0.5msec. min. for smooth oscillation start-up at 10ms/V max.

### **Frequency Stability**

Stability ±ppm	Temperature Range °C	Order Code
50	-40 to +85	Α
30	-40 to +85	В
25	-40 to +85	С
20	-40 to +85	D
15	-40 to +85	E
10	-40 to +85	F

# **OUTLINE & DIMENSIONS (in mm)**



### **PART NUMBERS**

XO327J oscillator part numbers are derived as follows:

Example: XO327J-32.768-B-30

