



# WX Series Low Frequency Crystal

August 2019

- The Pletronics' WX Series is a cylindrical watch crystal.
- 32.768 KHz only
- XY Cut Crystal

 Available in 2 sizes - WX:3x8mm, WX26:2x6mm

## Pletronics Inc. certifies this device is in accordance with the RoHS 3 and WEEE 2 directives.

Pletronics Inc. guarantees the device does not contain the following: Cadmium, Hexavalent Chromium, Mercury, PBB's, PBDE's

Weight of the Device: 0.042 grams

Moisture Sensitivity Level: 1 As defined in J-STD-020C

Second Level Interconnect code: e3

#### **Part Number:**

WX26	-32.768K	-6pF	-SMD	-xxx	
					Internal code or blank
					Only WX26 available in SMD
					WX26 available @ 6.0pF & 12.5pF load WX available @ 12.5pF load
					Nominal Frequency in KHz
					Model Number: WX: 3x8mm WX26: 2x6mm

### Reliability: Environmental Compliance

Parameter	Condition		
Mechanical Shock	MIL-STD-883 Method 2002, Condition A		
Vibration	MIL-STD-883 Method 2007, Condition A		
Solderability	MIL-STD-883 Method 2003		
Thermal Shock	MIL-STD-883 Method 1011, Condition A		

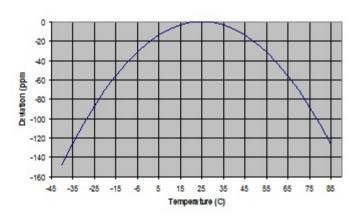


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### **Electrical Specification:**

Item	Min	Max	Unit	Condition
Frequency	32.768		kHz	
Calibration Frequency Tolerance	-20	+20	ppm	at +25°C, (+/- 30 ppm @6.0 pF Load)
Equivalent Series Resistance		40K	Ohms	
Drive Level	-	1.0	uW	
Turn Over Temperature	20	30	°C	Nominal is 25°C
Temperature Coefficient	-0.	034	ppm/°C²	typical
Q Factor	30000	1	Q	
Load Capacitance	12	2.5	pF	Standard (see options in part # table)
Shunt Capacitance	1.7		pF	Pin to Pin Capacitance, Max
Aging (for first year)	-3	+3	ppm/Yr	at 25°C <u>+</u> 3°C
Crystal Cut		XY Cut		
Operating Temperature Range for thru hole models	-10	+60	ç	
Operating Temperature Range For WX26-32.768K-SMD	-40	+85	°C	(30 ppm Std)
Storage Temperature Range	-55	+125	°C	
Shock Resistance	-5	+5	ppm	
Vibration Resistance	-5	+5	ppm	
Reflow Resistance	-10	+10	ppm	

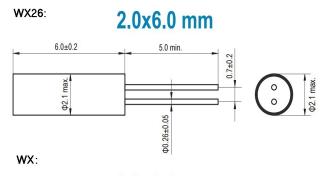
**XY Crystal Frequency** versus Temperature **Typical Performance:** 



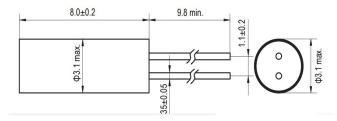


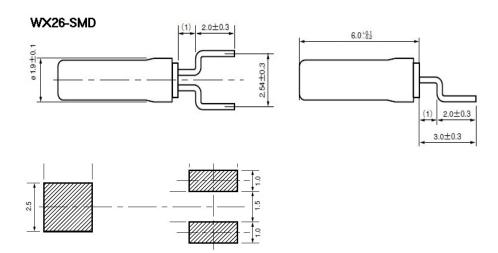
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### Mechanical:



## 3.0x8.0 mm







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### **Package Labeling**

Label is 1" x 2.6" (25.4mm x 66.7mm) Font is Courier New Bar code is 39-Full ASCII

Label is 1" x 2.6" (25.4mm x 66.7mm) Font is Arial

### **RoHS Compliant**

2nd LvL Interconnect Category=e3

Max Safe Temp=260C for 10s (Reflow only) 2X Max Max Safe Temp=280C for 15s (Wave solder only)

### **Part Marking:**

- · Marking consists of an internal manufacturing date code
- · Orientation of marking may be mixed on the tape
- · Traceability of part's specification is lost once removed from reel

### Layout and application information

- · Trace lengths to the crystal should be kept as short as possible.
- · The crystal connections are sensitive to noise.

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