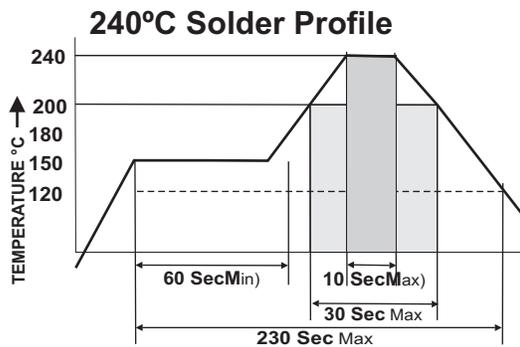
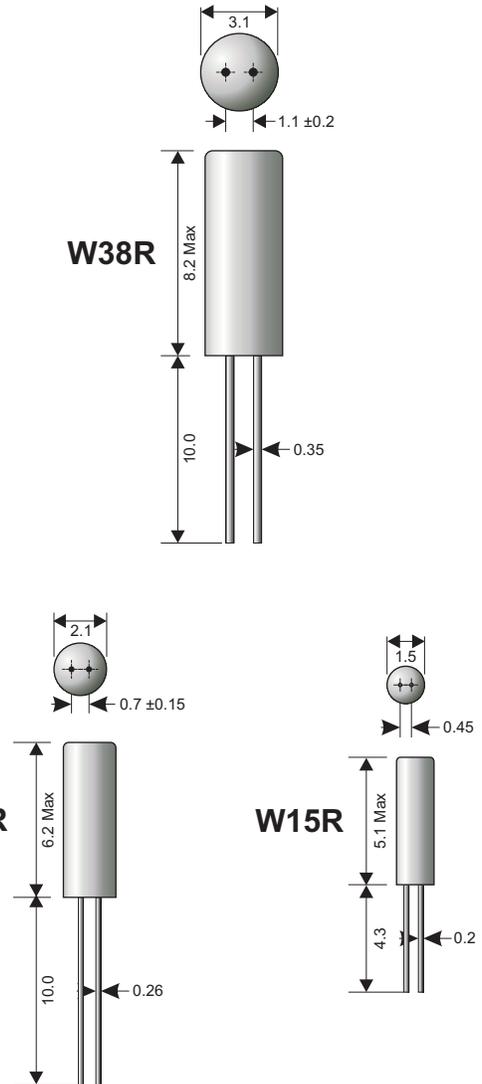




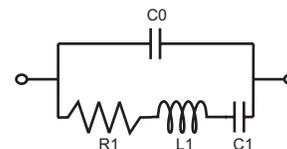
### Specifications

Package		W38R	W26R	W15R
Frequency (fo)		32.768kHz		
Frequency Stability	Calib. Tol. @ 25°C	±20ppm (std.)		
	Parabolic Coeffic.	-0.034 ±0.006ppm/°C <sup>2</sup>		
	Aging/Year (fa)	±3ppm (1st year)		
Temp. Range	Turnover (To)	25°C ±5°C		
	Operating (TOPR)	-10°C ~ +60°C		
	Storage (TSTG)	-40°C ~ +85°C		
Drive Level (DL)		1.0 mW Max		
Capacitance	Motional (C1)	0.0035pF	0.0030pF	0.0025pF
	Load (CL)	12.5pF	12.5pF	8.0pF
	Shunt (CO)	1.60pF	1.35pF	1.0pF
	Ratio (Typ)	460	450	400
Resistance	Insulation (IR)	500MΩ Min		
	Shock	±5ppm Max		
	Equiv. Series (R1)	35KΩ	35KΩ	40KΩ
Quality Factor)		90,000	70,000	80,000

### Dimensions (mm)



### Equivalent Circuit



- C0 Shunt Capacitance
- R1 Equivalent Series Resistance
- L1 Motion Inductance
- C1 Motion Capacitance



## Environmental And Mechanical

<b>Temperature</b>	10 Cycles of -30°C (30Mins), Normal (1Hr), 85°C (30Mins), Normal (1Hr)
<b>Shock</b>	Accelerated at 1000G for 1mS in each perpendicular axis.
<b>Vibration</b>	4 Cycles of 20G acceleration at 20 - 2,000Hz within 4 Minutes in each perpendicular axis.
<b>Solder</b>	Peak Temperature of 260°C Max for 10 Seconds with preheat of 160°C for 90±10% for 10 Seconds for a Maximum of 2 Cycles.

### Part Number

**W15R - 32.768 K - RX**

#### Temp Range

<b>R6</b>	-40°C ~ +85°C
<b>RC</b>	Custom Temp.

→ Standard RoHS Compliant 5.1 x 1.5mm Thru-Hole Cylinder Crystal  
 → Frequency: 32.768KHz  
 → Temperature Range; **Default:** -10°C ~ +60°C

### Part Number

**W26R - 32.768 K - RX**

#### Temp Range

<b>R6</b>	-40°C ~ +85°C
<b>RC</b>	Custom Temp.

→ Standard RoHS Compliant 6.2 x 2.1mm Thru-Hole Cylinder Crystal  
 → Frequency: 32.768KHz  
 → Temperature Range; **Default:** -10°C ~ +60°C

### Part Number

**W38R - 32.768 K - RX**

#### Temp Range

<b>R6</b>	-40°C ~ +85°C
<b>RC</b>	Custom Temp.

→ Standard RoHS Compliant 8.2 x 3.1mm Thru-Hole Cylinder Crystal  
 → Frequency: 32.768KHz  
 → Temperature Range; **Default:** -10°C ~ +60°C