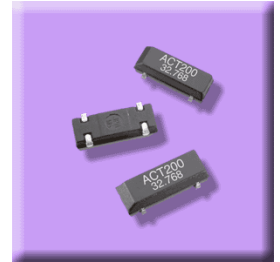


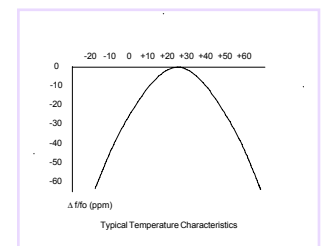
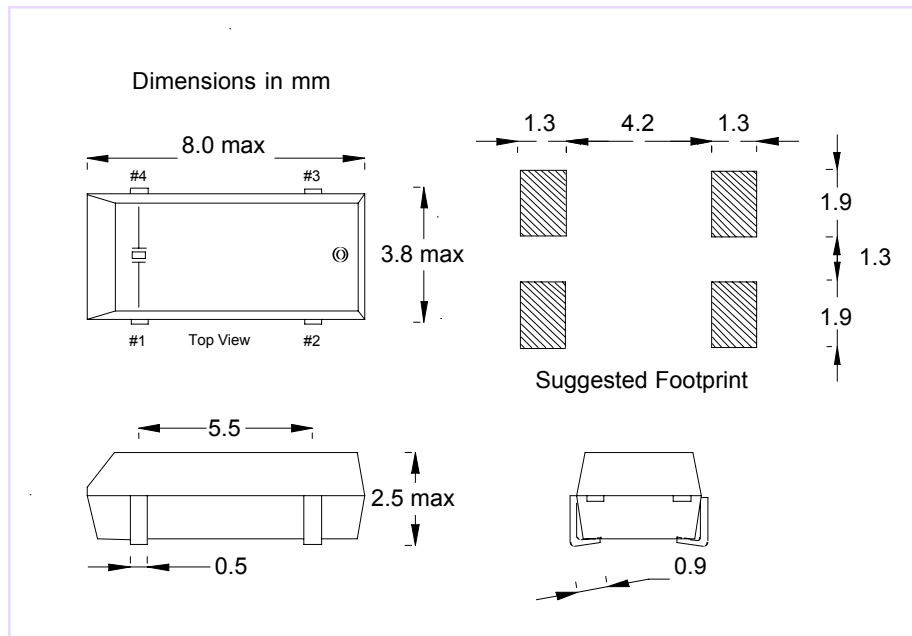
## ACT200

The **ACT200** is a miniature surface mount Watch Crystal whose low power consumption makes it ideal for portable applications. Its size makes it suitable for high density circuit boards or applications where space is limited and the tape and reel packaging means that it is ideal for automatic placement machines.

The heart of the device is a heat resistant cylinder type crystal which gives it high stability characteristics sufficient to allow reflow soldering



Parameter	Symbol	Specification	Condition
Nominal Frequency	$f_0$	32.768KHz	
Frequency Tolerance	$\Delta f/f_0$	$\pm 5\text{ppm}$ , $\pm 10\text{ppm}$ , $\pm 20\text{ppm}$ , $30\text{ppm}$	@25°C
Frequency v Temp Characteristics	$\Delta f/f_0$	See drawing	-10 ~ +60°C
Turnover Temperature	$T_m$	25°C $\pm 5^\circ\text{C}$	
Freq. Temp. coefficient	$\beta$	-0.034 $\pm 0.006\text{ppm}/^\circ\text{C}^2$	
Temp Operating Range	$T_{opr}$	-40 ~ +85°C	
Temp Storage Range	$T_{stg}$	-55 ~ +125°C	
Equivalent Series Resistance	ESR	50K $\Omega$ max	At 25°C
Shunt Capacitance	$C_0$	1.35pF Typical	
Load Capacitance	$C_L$	6 & 12.5pF	Others, please specify
Motional Capacitance	$C_1$	0.003pF Typical	
Capacitance Ratio	$\gamma$	450 Typical	
Drive Level	DL	1 $\mu$ W max	
Insulation Resistance	IR	500M $\Omega$ Min	@ DC 100V $\pm 15\text{V}$
Aging (first year)	$\Delta f/f_0$	$\pm 3\text{ppm}$ max	25°C $\pm 3^\circ\text{C}$



Please note that not all parameters can necessarily be specified in a single device

ISO9002 Registered - Registration number 6830/2

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