

3215A Series

3.2 x 1.5mm Watch crystal



RoHS & REACH compliant

Tuning fork crystal, ceramic package

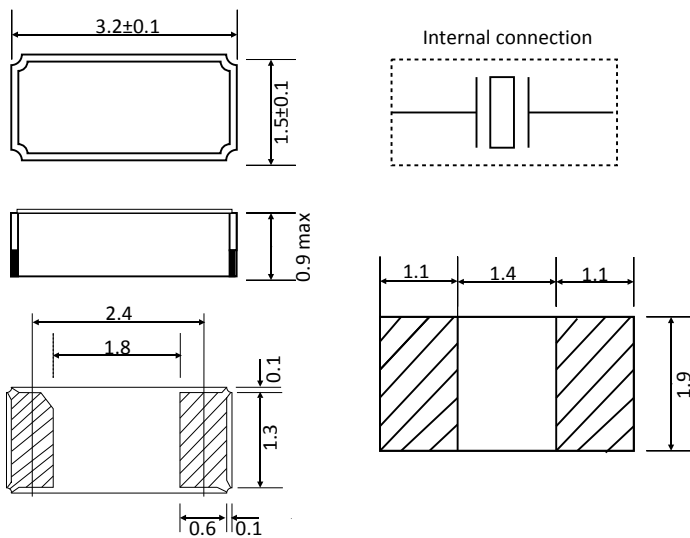
Frequency tolerance from $\pm 10\text{ppm}$ over $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Application: Consumer, metering, mobile communication, medical, industrial, UAVs, Drones

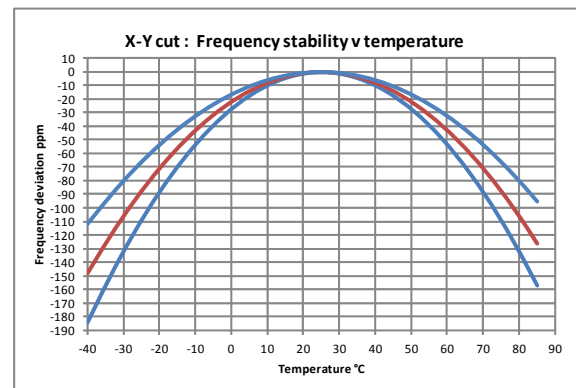


Parameters		Specification	Remarks
Frequency	F _{nom}	32.768kHz	
Frequency tolerance	F _{tol}	$\pm 10\text{ppm}$, $\pm 20\text{ppm}$	At $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
Operating temperature range	T _{use}	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$	
Storage temperature	T _{stg}	$-55^{\circ}\text{C} \sim +125^{\circ}\text{C}$	
Temperature coefficient	K	$-0.034 \pm 0.006 \text{ ppm}/^{\circ}\text{C}^2$	
Turnover temperature	T _i	$25^{\circ}\text{C} \pm 5^{\circ}\text{C}$	
Load capacitance	CL	6pF, 7pF, 9pF, 12.5pF	
Equivalent series resistance	ESR	70K Ω max	For 50K Ω max - please enquire
Motional capacitance	C ₁	3.3fF typical	
Shunt capacitance	C ₀	0.95pF typical	
Drive level	DL	1.0 μW max	For 0.5 μW max - Please enquire
Frequency aging	F _{age}	$\pm 3.0\text{ppm}$ max	First year
Insulation resistance	IR	500M Ω min	at DC100V $\pm 15\text{V}$

Dimensions (mm)



Frequency stability vs temperature



Part number generation

SY	00003	G	I	H	D	-PF
ACT Series Code	Frequency (KHz)	Frequency Tolerance ($\pm\text{ppm}$)	Operating Temperature Range ($^{\circ}\text{C}$)	Load capacitance (CL)	Packaging (Tape & Reel)	RoHS
SY	32.768kHz = 00003	$\pm 10 = \text{C}$ $\pm 20 = \text{G}$	$-40 \sim +85 = \text{I}$	6pF = N 7pF = M 9pF = K 12.5pF = H	Loose/Sample = L 3000pcs = D	RoHS = -pF

Note: It is important to suffix the above part number with full frequency required to give a completed part number as illustrated below.

Full Example Part Number : SY00003GIHD-PF (32.768kHz)

ACT (A wholly owned Acal BFi Company)

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ISO9001 Registered

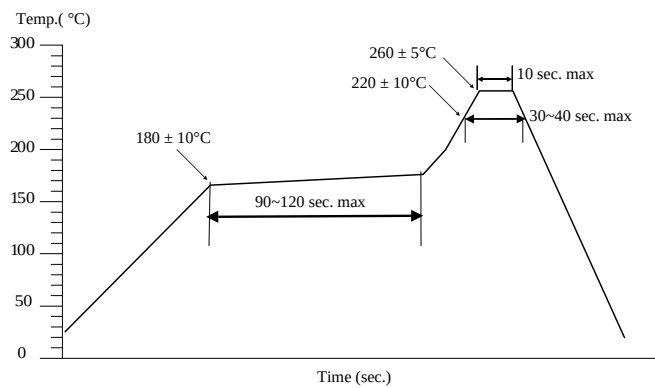
Specifications subject to change without notification

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Reflow profile



Additional information

Drawing control: (Internal use only)
Commodity code: 854 160 00 00
Issue number: N1
Date: 1/02/2017
Internal reference: H2