

3215A Series

3.2 x 1.5mm Watch crystal



RoHS & REACH compliant

Tuning fork crystal, ceramic package

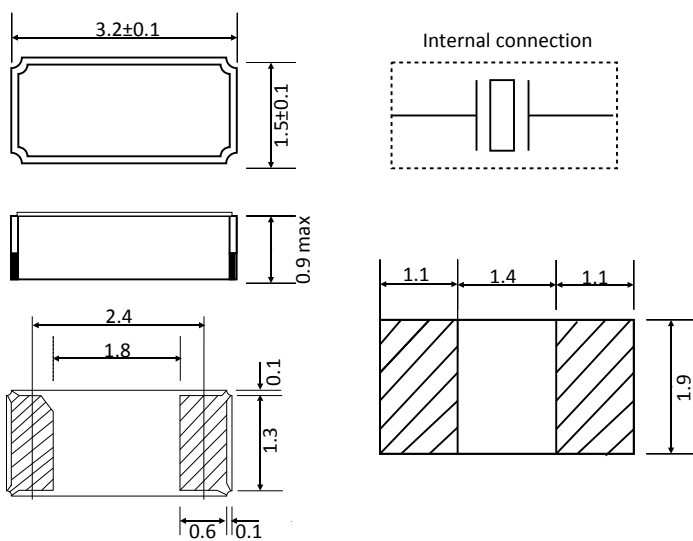
Frequency tolerance from $\pm 10\text{ppm}$ over $-40^\circ\text{C} \sim +85^\circ\text{C}$

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

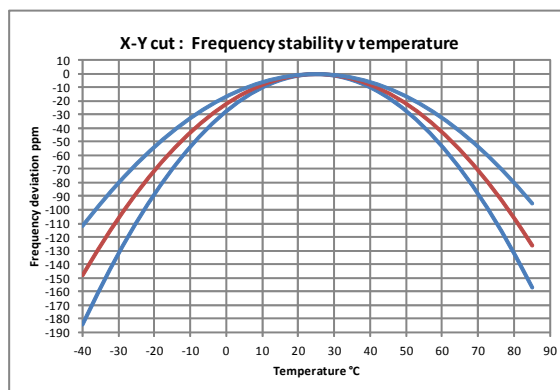


Parameters	Specification	Remarks
Frequency r	F_nom 32.768kHz	
Frequency tolerance	F_tol $\pm 10\text{ppm}, \pm 20\text{ppm}$	At $25^\circ\text{C} \pm 3^\circ\text{C}$
Operating temperature range	T_use $-40^\circ\text{C} \sim +85^\circ\text{C}$	
Storage temperature	T_stg $-55^\circ\text{C} \sim +125^\circ\text{C}$	
Temperature coefficient	K $-0.034 \pm 0.006 \text{ ppm}/^\circ\text{C}^2$	
Turnover temperature	Ti $25^\circ\text{C} \pm 5^\circ\text{C}$	
Load capacitance	CL 6pF, 7pF, 9pF, 12.5pF	
Equivalent series resistance	ESR 70K Ω max	For 50K Ω max - please enquire
Motional capacitance	C1 3.3fF typical	
Shunt capacitance	CO 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 15V

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

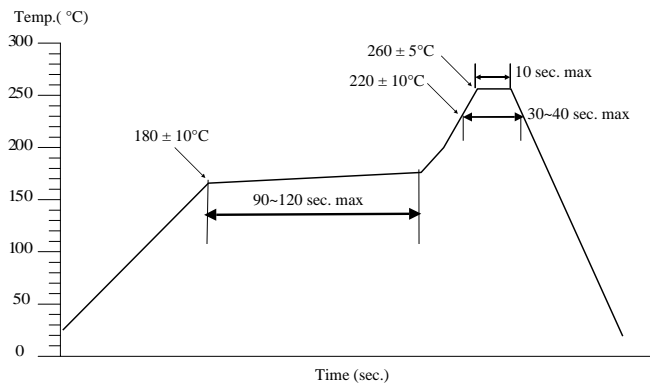
Specifications subject to change without notification

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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

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