

ACT38

(For MHz frequencies in this package please see ACT39/38A)



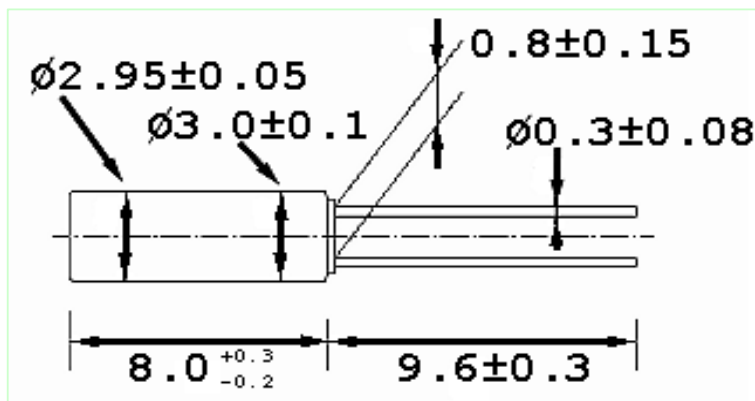
The ACT38 is a miniature cylindrical package offering high vibration and shock resistance together with high stability. It is most suitable for portable equipment and close packing density. The series offers a wide, low frequency range and is popular for use in Microprocessor, Consumer and Instrumentation applications



Specification

Parameter	Symbol	Specification	Condition
Frequency Range	fo	30.00 ~ 100KHz	
Frequency Tolerance @25°C	$\Delta f/fo$	± 20 ppm typical (5 to 100ppm available)	Please specify
Turnover Temperature	Tm	25°C ± 5 °C	
Freq. Temp. coefficient	β	-0.034 \pm 0.005ppm / °C ² max	
Temp Operating Range	Topr	-10 ~ +60°C	
Temp Storage Range	Tstg	-40 ~ +85°C	
Equivalent Series Resistance	ESR	20~40K Ω	@ 25°C
Shunt Capacitance	C0	1.8pF max	
Load Capacitance	CL	12.5pF (Others available.)	Please specify
Motional Capacitance	C1	3.0fF typical	(Typical)
Drive Level	DL	1.0 μ W max	
Q Factor	Qf	60,000 typical	
Insulation Resistance	IR	500M Ω Min	
Aging	Fa	± 5 ppm	@ 25°C ± 3 °C

DIMENSIONS (mm)



Please note that all parameters can not necessarily be specified in the same device

Customer to Specify : Frequency, Frequency Tolerance, Operating Temperature Range & Load Capacitance

In line with our ongoing policy of product evolution and improvement, the above specification may be subject to change without notice.

ISO9001: 2000 Registered

For quotations or further information please contact us at:

3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK

<http://www.actcrystals.com>

Issue : 2 C1

Date : 07/09/04

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SOLDERING of CYLINDER CRYSTALS

Lead wire should be soldered within 10seconds with the iron having a tip temperature of less than 270°C. Can must not exceed 150°C

With regard to wave soldering it is recommended that the process is carried out with the crystal unit set upright on the circuit board. Should the process be carried out with the crystal unit on its side then steps must be taken to prevent heat transfer through the can.

Should the whole crystal unit be heated (in a re-flow oven for example) it will result in a marked deterioration of the performance or even failure to oscillate. This is due to the internal construction of the crystal unit which involves the use of solder.

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