

### Tel: 0044 (0)118 979 1238 Fax: 0044 (0)118 979 1283 E-mail: info@actcrystals.com

# ACT31

The ACT31 is a compact crystal resonator offering high vibration and shock resistance together with high stability. It is most suitable for portable equipment and close packing density. The device is offered with frequencies between 3.5 and 4.0MHz.

## Specification

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Parameter	Symbol	Specification	Condition
Frequency	fo	3.579545-10MHz	
Frequency Tolerance @25°C	∆f/fo	±10~50ppm (TYP ±30ppm)	Please specify
Frequency Stability	∆f/fo	±10~50ppm (TYP ±30ppm)	Please specify
Temp Operating Range	Topr	-10 ~ +70°C	
Temp Storage Range	Tstg	-40 ~ +85°C	
Equivalent Series Resistance	ESR _ - - -	200Ω max	fo 3.579545~3.999MHz
		150Ω max	fo 4.0~4.999MHz
		120Ω max	fo 5~5.999MHz
		100Ω max	fo 6~6.999MHz
		80Ω max	fo 7~8.999MHz
		60Ω max	fo 9~10MHz
Shunt Capacitance	C0	5.0pF typical	
Load Capacitance	CL	16.0pF (Others available.)	Please specify
Drive Level	DL	10~100 μ W ( 30μW typ)	
Insulation Resistance	IR	500MΩ Min	DC100V±15V
Aging	Fa	±5ppm max	@ 25°C ±3°C 1 <sup>st</sup> vear



Lead Surface	
Material	
+Cu, +Sn	

### SOLDERING of CYLINDER CRYSTALS

Lead wire should be soldered within 5 seconds with the iron having a tip temperature of less than 270°C. Case 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 amarked 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.

> 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 evolvement and improvement, the above specification may be subject to change without notice. ISO9001: 2000 Registered Issue : 4 C1b For quotations or further information please contact us at: 3 The Business Centre, Molly Millars Lane, Wokingham, Berks, RG41 2EY, UK Date : 31-5-2012

http://www.actcrystals.com

**Compatible with Eu Directive** 2002/EC - RoHS



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### ACT31 Device series code is EO



#### NOTES :

- Other Tolerances, CL's and other Operating Temperature Ranges may be available. As each of these specification parameters impact on each other, it is not always possible to combine all options in one device. Therefore, if a specification not catered for above is required, please contact us directly for the relevant part number code(s).
- 2) ACT are always happy to consider truly custom specification parts which may require non-standard specification parameters, specific testing, customer requested AQL requirements, non standard packaging or taping and reeling and custom marking. Such devices would normally be allocated a custom specification ACT31device may have a part number such asEO0800C- C1561-PF)

#### ISO9001 Registered

For quotations or further information please contact us at: Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, United Ki http://www.actcrystals.com

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