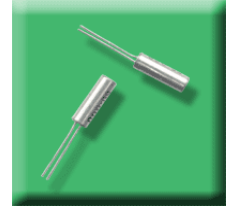


ACT39 / 38A

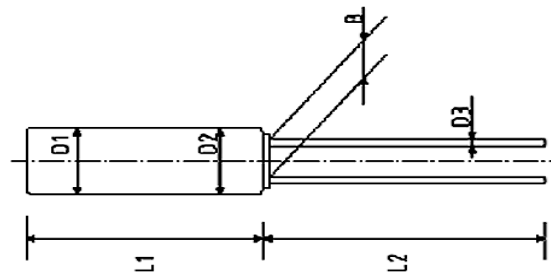
Compatible with Eu Directive
 2002/EC - RoHS



The ACT39 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 4.0 and 70.0MHz.

Specification

Parameter	Symbol	Specification	Condition
Frequency	fo	4.0-14MHz	case size 3x9mm (39)
		14-49.5MHZ	case size 3x8mm (38A)
		49.5-70MHz	case size 3x9mm (39)
Frequency Tolerance @25°C	$\Delta f/fo$	$\pm 30\sim 50$ ppm	4.0-10MHz
		$\pm 10\sim 50$ ppm (typ ± 30)	10-49.5MHZ
		$\pm 30\sim 50$ ppm	49.5-70MHz
Frequency Stability	$\Delta f/fo$	$\pm 30\sim 50$ ppm	4.0-10MHz
		$\pm 10\sim 50$ ppm (typ ± 30)	10-49.5MHZ
		$\pm 30\sim 50$ ppm	49.5-70MHz
Temp Operating Range	Topr	-20 ~ +70°C	4.0-10MHz
		-10~+70°C	10~49.5MHz
		-20 ~ +70°C	49.5~70MHz
Temp Storage Range	Tstg	-40 ~ +85°C	
Equivalent Series Resistance	ESR	150 Ω max	4.0~6.0MHz
		100 Ω max	6.0~10.0MHz
		60 Ω max	10.0~14.0MHz
		40 Ω max	16.0~20.0MHz
		30 Ω max	20.0~30.0MHz
		100 Ω max	30.0~49.5MHz(3rd O/T)
		80 Ω max	49.5~70MHz(3rd O/T)
Shunt Capacitance	C0	5.0pF typical	
Load Capacitance	CL	16.0pF (Others available.)	Please specify
Drive Level	DL	50~100 μ W	
Insulation Resistance	IR	500M Ω Min	DC100V \pm 15V
Aging	Fa	± 5 ppm max	@ 25°C ± 3 °C 1 st year



	L1	L2	D1	D2	D3	B
ACT38A	8.0	9.6	$\phi 2.95$	$\phi 3.0$	$\phi 0.3$	0.8
ACT39	8.61	9.6	$\phi 2.95$	$\phi 3.0$	$\phi 0.3$	0.8

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>

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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 temperature should 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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