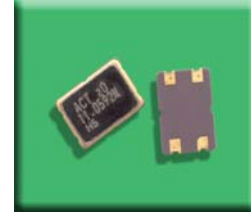


## ACT421SMX-4

The **ACT421SMX-4** is a 4 pad, high quality, low aging SMD Crystal in a ceramic base / metal lid package, seam welded for good long term reliability. The lid is grounded through the package to assist with EMI issues and the pads are gold plated. It's wide frequency range and frequency tolerance / stability options with its small size make the device ideal for many applications including Notebook, PCMCIA, Instrumentation, Microprocessor Systems And Communications equipment.

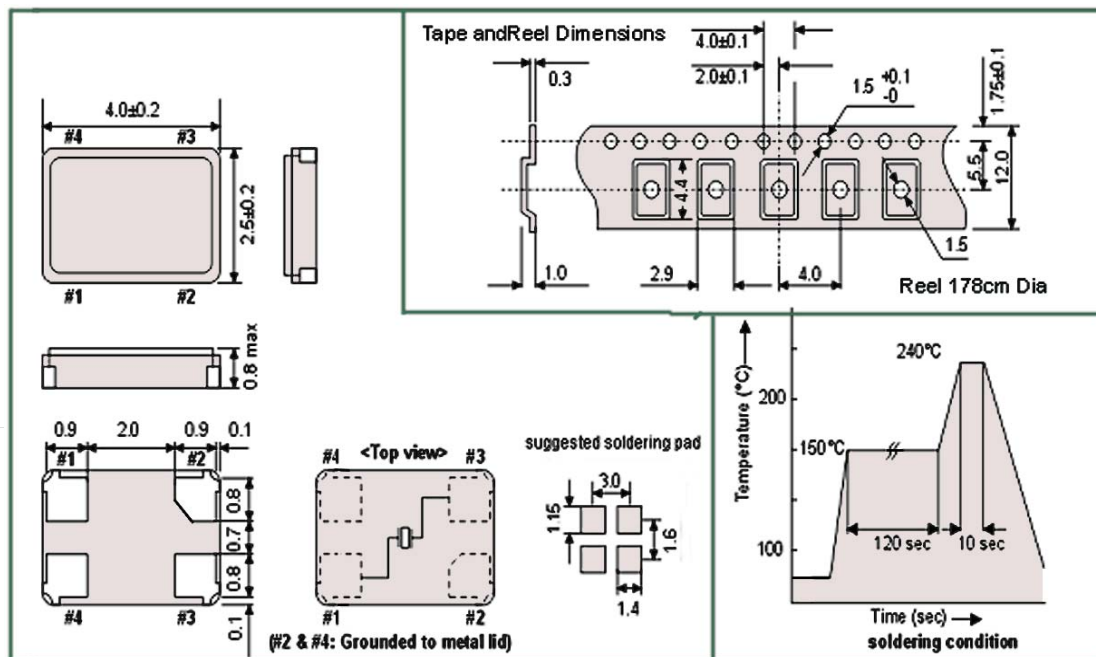
Compatible with Eu Directive  
2002/EC - RoHS



### Specification

Parameter	Symbol	Specification	Condition
Frequency Range	fo	12.00 ~ 50MHz	Please specify
Frequency Tolerance @25°C	$\Delta f/fo$	$\pm 10\text{ppm} \sim 30\text{ppm}$	Please specify
Stability over temp range	Tc	$\pm 10\text{ppm} \sim 30\text{ppm}$	Please specify
Temp Operating Range	Topr	-10 ~ +60°C, -20 ~ +70 or -40 ~ +85°C	Please specify
Temp Storage Range	Tstg	-55 ~ +125°C	
Equivalent Series Resistance	ESR	See table below	
Load Capacitance	CL	16pF, 20pF, 30pF, 32pF std	Please specify
Shunt Capacitance	C0	5pF max	
Drive Level	DL	10 $\mu$ W (100 $\mu$ W max)	
Insulation Resistance	IR	500M $\Omega$ min	@100V DC
Aging	Fa	$\pm 3\text{ppm} / \text{year max}$	@25°C
Shock		Drop test 3 times onto 2mm stainless steel from 75cm	

Freq. Range (MHz)	ESR ( $\Omega$ ) max	Mode
12.0~24	80	Fundamental
24~50	60	Fundamental



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

Customer to specify : Frequency, Frequency Tolerance, Temperature Stability, Operating Temperature & Load Capacitance

In line with our ongoing policy of product evolution and improvement, the above specification may 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, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

Issue: 3 SC  
Date: 01/02/06