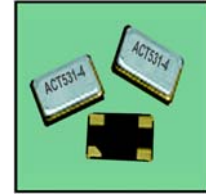


ACT531SMX-4

Compatible with Eu Directive
2002/EC - RoHS

The **ACT531SMX-4** is a 4 pad, high quality, low aging, seam welded packaged crystal. Utilising a ceramic base with a metal lid, it provides for the durability and reliability, necessary for strenuous processes like infrared and vapour reflow. The lid is grounded through the package and the pads are gold plated. The device is very suitable for automatic placement on PCB's. With an excellent range of frequencies and stabilities it has become one of the optimum choices for design engineers. **Applications** include Communications, Microprocessor Systems, Instrumentation and particularly Wireless Communications applications. Available loose or on 1,000pc reels.



Specification

Parameter	Symbol	Specification	Condition
Frequency Range	fo	12.00 ~ 48.00 MHz	Please specify
Frequency Range	fo	10.00 ~ 11.99 MHz For availability please enquire.	
Frequency Tolerance	$\Delta f/fo$	$\pm 10\text{ppm} \sim 50\text{ppm}$ (@25°C $\pm 3^\circ\text{C}$) refer to table 2	Please Specify
Stability over Temp Range	Tc	$\pm 10\text{ppm} \sim 50\text{ppm}$ refer to table 2	Please specify
Temp Operating Range	Topr	-20 ~ +70°C	Please specify
Temp Storage Range	Tstg	-40 ~ +85°C	
Equivalent Series Resistance	ESR	Please refer to Table 1	
Load Capacitance	CL	8 ~ 30pF or Series Resonance	Please specify
Shunt Capacitance	C0	7pF max	
Drive Level	DL	10 $\mu\text{W} \sim 300\mu\text{W}$ max. (100 μW Typical)	
Insulation Resistance	IR	500M Ω min	@100V DC
Reflow Process		10 Seconds (max) @260°C	
Aging	Fa	$\pm 5\text{ppm} / \text{year}$ max	@25°C

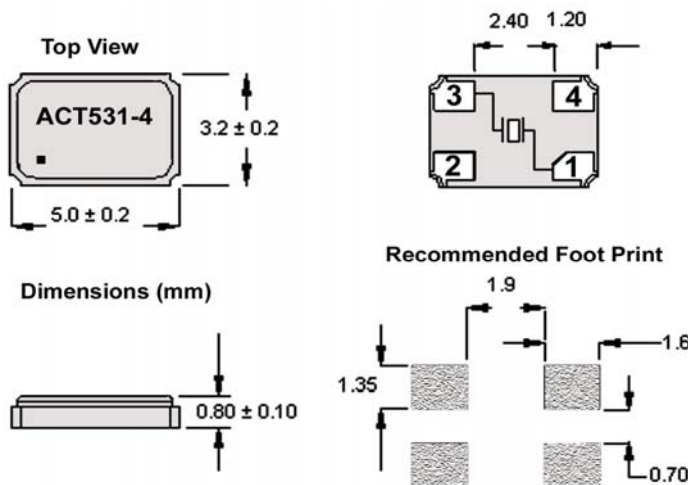


Table 1

Frequency(MHz)	ESR Ω max	Mode
10.0~19.999	100	Fundamental
20.0~29.999	70	Fundamental
30.0~48.0	50	Fundamental

Pad surface material Au

Table 2

		$\pm 10\text{ppm}$	$\pm 15\text{ppm}$	$\pm 20\text{ppm}$	$\pm 30\text{ppm}$	$\pm 50\text{ppm}$
Tolerance	25°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	-20~+70°C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stability	-40~+85°C	Enquire	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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 be subject to change without notice

ISO9001:2000 Registered

For quotations or further information please contact us at:

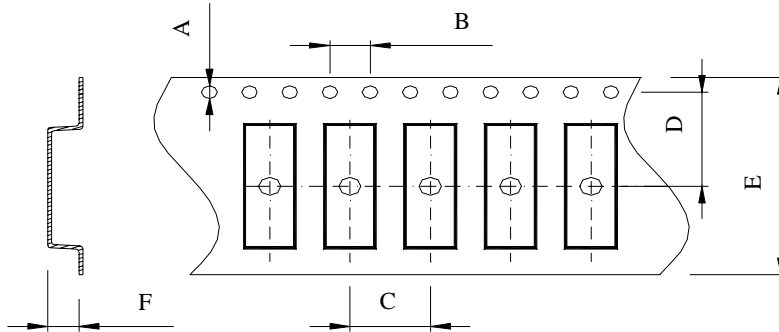
3 The Business Centre, Molly Millars Lane, Wokingham, Berkshire, RG41 2EY, UK

<http://www.actcrystals.com>

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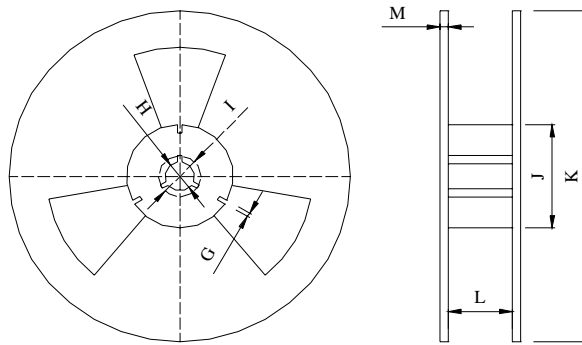
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ACT531SMX-4 Series Tape Dimensions (Units in mm)



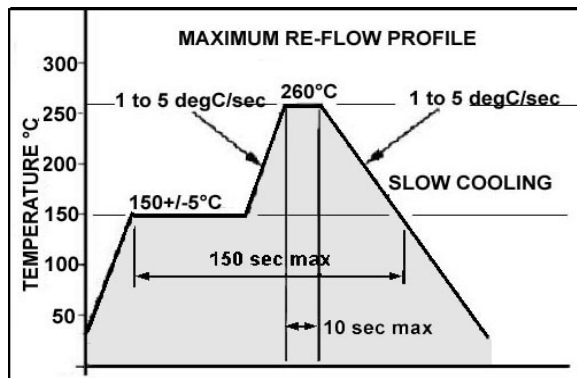
A	B	C	D	E	F
1.5	4.0	8.0	5.5	12.0	1.5

Reel Dimensions (Units in mm) * 1,000 piece reels



G	H	I	J	K	L	M
2.5	13.5	21.6	60.0	178.0	13.5	1.6

Reflow Information



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