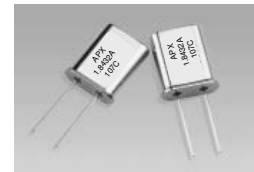


**CRYSTAL UNITS (Rohs Compliant / Lead Free)**  
**HC- 49U Crystal (APU Series)**



**- SPECIFICATIONS**

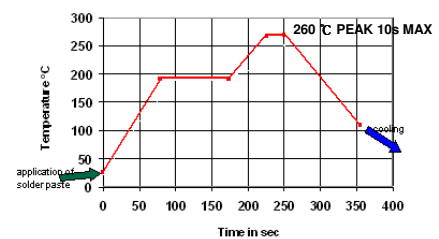
<b>FREQUENCY RANGE</b>		1.8432MHz TO 125.0MHz
<b>MODE OF OSCILLATION</b>	<b>FUNDAMENTAL</b>	1.8432MHz TO 32.0MHz
	<b>THIRD OVERTONE</b>	24.0MHz TO 79.999MHz
	<b>FIFTH OVERTONE</b>	80.0MHz TO 125.0MHz
<b>FREQUENCY TOLERANCE AT 25°C</b>		±30PPM STANDARD <±30PPM ARE AVAILABLE
<b>FREQUENCY STABILITY OVER TEMPERATURE RANGE</b>		±30PPM STANDARD <±30PPM ARE AVAILABLE
<b>OPERATING TEMPERATURE RANGE</b>		-20°C TO +70°C STANDARD -40°C TO +85°C EXTENDED
<b>STORAGE TEMPERATURE RANGE</b>		-55°C TO +125°C
<b>SHUNT CAPACITANCE</b>		7pF MAXIMUM
<b>LOAD CAPACITANCE</b>		10pF TO SERIES OR SPECIFIED
<b>EQUIVALENT SERIES RESISTANCE (ESR)</b>		SEE TABLE
<b>DRIVE LEVEL</b>		100 TO 500µW
<b>AGING PER YEAR</b>		±5PPM MAXIMUM STANDARD <±5PPM ON REQUEST



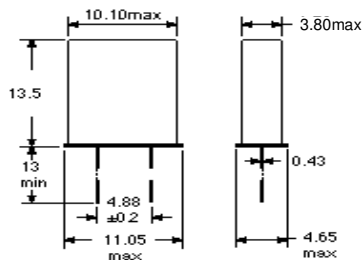
**- Equivalent Series Resistance (ESR) and Mode Of Vibration (Mode)**

Frequency Range (MHz)	ESR max.	Mode	Frequency Range (MHz)	ESR max.	Mode
1.8432 to 1.999	650	Fundamental/AT	6.000 to 7.999	50	Fundamental/AT
2.000 to 2.999	500	Fundamental/AT	8.000 to 12.999	35	Fundamental/AT
3.000 to 3.499	250	Fundamental/AT	13.000 to 32.000	25	Fundamental/AT
3.500 to 3.999	150	Fundamental/AT	24.000 to 29.999	60	Third Overtone
4.000 to 4.999	100	Fundamental/AT	30.000 to 79.999	40	Third Overtone
5.000 to 5.999	80	Fundamental/AT	80.000 to 125.000	90	Fifth Overtone

**- SOLDER REFLOW PROFILE**



**- OUTLINE DIMENSIONS**



Unit: mm  
 Packaging: 1,000 pcs/box

ORDERING CODE SYSTEM (VERSION 1.1 UPDATED MAY 2008)					EXAMPLE:
SERIES	FREQUENCY	LOAD CAPACITANCE	TEMPERATURE RANGE	TOLERANCE/STABILITY	APU-1.8432-10X-2020
APU	IN MHZ	10pF TO SERIES OR SPECIFIED	X: EXT.TEMP.-40 TO +85°C BLANK: STANDARD	2020: PPM/PPM BLANK: STANDARD	

NON STANDARD FREQUENCIES AND SPECIFICATIONS ARE AVAILABLE ON REQUEST

ActPro Ltd. (APX-Crystal) PROREP EDGE Meditronics PTE Ltd.	HONG KONG FRANCE SINGAPORE	Email: <a href="mailto:sales@apx-crystal.com">sales@apx-crystal.com</a> Email: <a href="mailto:sales@prorep.fr">sales@prorep.fr</a> Email: <a href="mailto:sales@edgemeditronics.com.sg">sales@edgemeditronics.com.sg</a>	Internet: <a href="http://www.apx-crystal.com">www.apx-crystal.com</a> Internet: <a href="http://www.prorep.fr">www.prorep.fr</a> Internet: <a href="http://www.edgemeditronics.com.sg">www.edgemeditronics.com.sg</a>	Tel: 852-3625 2368 Tel: 33-1-4812 1736 Tel: 65-6455 0521	Fax: 852-2633 8503 Fax: 33-1-4812 1739 Fax: 65-6455 0857
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Specifications are subject to change without notice