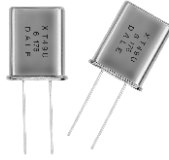


## Resistance Welded Holder Type Crystal Unit



The XT49U series is an industry standard AT cut crystal housed in a HC-49U package. It is our standard resistance weld type quartz crystal.

### FEATURES

- Low cost
- Industry standard
- Excellent aging
- Wide frequency range
- “AT” cut crystal
- 100 % Lead (Pb)-free and RoHS compliant



**RoHS**  
COMPLIANT

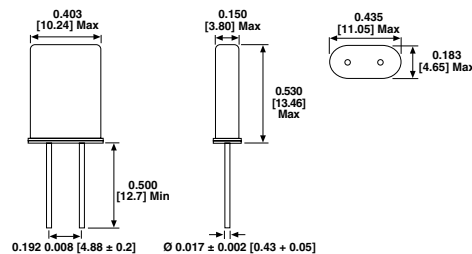
### STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	UNIT	MIN	TYPICAL	MAX
Frequency Range	$F_O$		MHz	1.8432		125
Frequency Tolerance	$\Delta F/F_O$	at 25 °C	ppm	$\pm 10$	$\pm 30$	$\pm 50$
Temperature Stability	TC	ref to 25 °C	ppm	$\pm 10$	$\pm 30$	$\pm 50$
Operating Temperature Range	$T_{OPR}$		°C	- 20		+ 70
Storing Temperature Range	$T_{STG}$		°C	- 40		+ 85
Shunt Capacitance	$C_O$		pF			7
Load Capacitance	CL	Customer Specified	pF	10		Series
Insulator Resistance	IR	100 $V_{DC}$	$M\Omega$	500		
Drive Level	DL		$\mu W$		100	500
Aging	Fa	at 25 °C, per year	ppm	- 5.0		+ 5.0

### EQUIVALENT SERIES RESISTANCE (ESR) AND MODE OF VIBRATION (MODE)

FREQUENCY RANGE (MHz)	MAX ESR ( $\Omega$ )	MODE	FREQUENCY RANGE (MHz)	MAX ESR ( $\Omega$ )	MODE
1.8432 to 1.999	650	Fundamental	6.000 to 7.999	50	Fundamental
2.000 to 2.999	500	Fundamental	8.000 to 12.999	35	Fundamental
3.000 to 3.499	250	Fundamental	13.000 to 32.000	25	Fundamental
3.500 to 3.999	150	Fundamental	24.000 to 29.999	60	3 <sup>rd</sup> Overtone
4.000 to 4.999	100	Fundamental	30.000 to 79.999	40	3 <sup>rd</sup> Overtone
5.000 to 5.999	80	Fundamental	80.000 to 125.000	90	5 <sup>th</sup> Overtone

### DIMENSIONS in inches [millimeters]



### ORDERING INFORMATION

XT49U MODEL	R OTR Blank = Standard R = - 40 °C to + 85 °C	-20 LOAD Blank = Series - 16 = 16 pF - 20 = 20 pF - 30 = 30 pF - 32 = 32 pF	SP OPTIONS Blank = Standard SL = Sleeve SP = Spacer	M FREQUENCY/MHz	e2 JEDEC LEAD (Pb)-FREE STANDARD
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### GLOBAL PART NUMBER

X	T	9	U	2	0	A	N	A	4	M
MODEL				LOAD STABILITY		PACKAGE CODE	OPTIONS		FREQUENCY	



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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">T</td> <td style="text-align: center;">9</td> <td style="text-align: center;">S</td> </tr> </table>	X	T	9	S	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">0</td> </tr> </table>	2	0	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">A</td> </tr> </table>	A	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">N</td> <td style="text-align: center;">A</td> </tr> </table>	N	A	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">0</td> <td style="text-align: center;">M</td> </tr> </table>	4	0	M	
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