

STANDARD RESISTANCE WELD THRU-HOLE PACKAGE - HC49U Series

FEATURES

- RoHS Compliant (Pb-Free), Wide Frequency Range Available
- AT-cut Crystal, Excellent Aging, Extended Temperature Range
- Industry Standard Package, Low Cost, Poplular Microprocessor Crystals
- Options: Third Lead Welded on Top; Vinyl Sleeve; Insulator Tab; Formed Leads for SMT

SPECIFICATIONS

1.8432 MHz to 200.000 MHz Frequency Range

Resonance Mode 1 = Fundamental (1 to 40 MHz); 3 = 3rd Overtone (20 to 100 MHz)

5 = 5th Overtone (80 to 150 MHz); 7 = 7th Overtone (110 to 200 MHz)

Calibration Tolerance @25°C

 $A = \pm 50 \text{ ppm}$; $B = \pm 30 \text{ ppm}$; $C = \pm 20 \text{ ppm}$; $D = \pm 15 \text{ ppm}$; $E = \pm 10 \text{ ppm}$ Frequency Stability Ref @25°C $100 = \pm 100 \text{ ppm}$; $50 = \pm 50 \text{ ppm}$; $25 = \pm 25 \text{ ppm}$; $10 = \pm 10 \text{ ppm}$

Temperature Range A = 0°C to 70°C; B = -40°C to 85°C; C = -10°C to 60°C; D = -20°C to 70°C

Crystal Aging ±5 ppm / year Maximum

Storage Temperature -55°C to 125°C

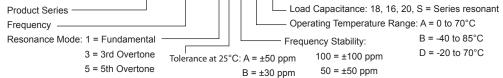
Load Capacitance (CL) CL = 18 pF (Standard), 16 pF, 20 pF, others, or S = Series resonant

Shunt Capacitance 7 pF Maximum

Drive Level 0.1 mW Typical, 1 mW Maximum

Pullability (option) May be specified in terms of frequency shift over a certain range of CL

Creating a Part Number HC49U-10M000-1 A 50 D 18 -options



 $C = \pm 20 ppm$

Equivalent Series Resistance

	Frequency (MHz)	Mode	Max ESR (Ohms)
٠	1.800 - 1.999 2.000 - 2.399 2.400 - 2.999 3.000 - 3.199 3.200 - 3.699 3.700 - 4.199	Fund Fund Fund Fund Fund Fund	750 500 250 150 120 100
	4.200 - 5.999	Fund	70

Frequency (MHz)	Mode	Max ESR (Ohms)
6.000 - 7.999	Fund	40
8.000 - 12.499	Fund	35
12.500 - 15.999	Fund	25
16.000 - 40.000	Fund	20
23.000 - 100.00	3rd O/T	40
80.000 - 150.00	5th O/T	80
110.00 - 200.00	7th O/T	120

 $30 = \pm 30 \text{ ppm}$

OUTLINE DRAWING

