

HC-49U

Thru-Hole Crystal

Size, mm

11.5 x 5.0 x 13.5

Frequency Stability

±15 PPM

Temperature Range

-20°C to 70°C

Frequency Range

1.8432-125.0 MHz

Features

- Meets NEL requirements for product reliability
- Resistance welded low profile holder
- Frequency range 1.8432 MHz to 125.0 MHz
- Special frequencies available

Thru-Hole Crystal HC-49U

Frequency Range: 1.8432 MHz to 125.0 MHz

Creating a Part Number

HC-49U - 10.00 - 20 - E - A - XX

Holder Type

Frequency (MHz)

Load Capacitance

XXpF; S: Series Resonant

Mode of Operation

F: AT-Cut Fundamental

T: 3rd Overtone

V: 5th Overtone

Available Options

Blank = None (std) S = Insulator Tab

P = Third Lead

L = Custom Lead Length

TR = Tape & Reel

Frequency Tolerance/Temperature Stability at 25° (Ref to 25°C)

A: ±30 ppm/±30 ppm -20°C to 70°C

B: ±10 ppm/±10 ppm -20°C to 70°C

C: ±15 ppm/±30 ppm -20°C to 70°C

D: ±50 ppm/±50 ppm -20°C to 70°C

E: ±30 ppm/±30 ppm -40°C to 85°C

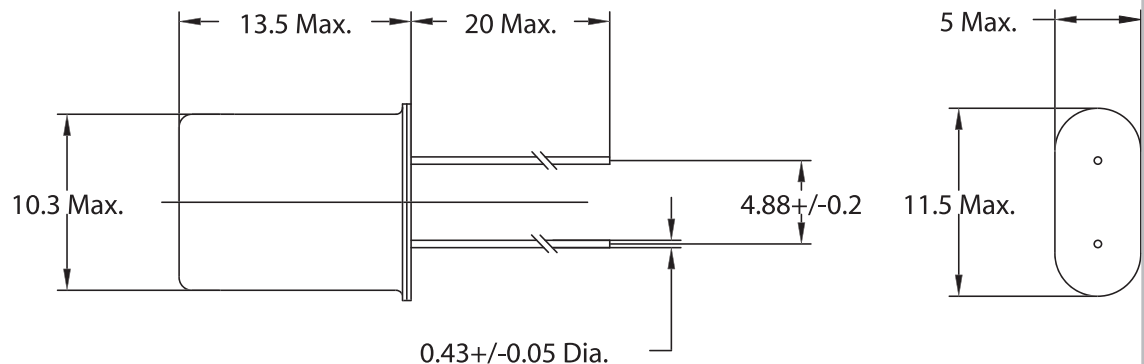
F: ±50 ppm/±50 ppm -40°C to 85°C

G: ±50 ppm/±100 ppm -40°C to 85°C

Electrical Specifications

Frequency Range (F ₀)	1.8432 MHz to 125.000 MHz	
Storage Temperature Range (T _{STG})	-40°C to 85°C	
Shunt Capacitance (C ₀)	7 pF Max.	
Load Capacitance (C _i)	10 to 32 pF or Series Resonant	
Insulation Resistance	500 Megaohms Minimum at 100 V _{DC}	
Drive Level	1 mWatts Max.	
Aging (at 25°C)	±5 ppm/year Max.	
Equivalent Series Resistance	Frequency Range	E.S.R. (Ω) Max
Mode: Fundamental	1.800 to 1.999 MHz	650
Mode: Fundamental	2.000 to 2.999 MHz	500
Mode: Fundamental	3.000 to 3.499 MHz	250
Mode: Fundamental	3.500 to 3.999 MHz	150
Mode: Fundamental	4.000 to 4.999 MHz	100
Mode: Fundamental	5.000 to 5.999 MHz	80
Mode: Fundamental	6.000 to 7.999 MHz	50
Mode: Fundamental	8.000 to 12.999 MHz	35
Mode: Fundamental	13.000 to 30.999 MHz	25
Mode: 3rd Overtone	24.000 to 29.999 MHz	60
Mode: 3rd Overtone	30.000 to 80.000 MHz	40
Mode: 5th Overtone	70.000 to 125.000 MHz	90

Drawing Specifications



Dimensions shown in millimeters.



For the most up to date specifications on each NEL product, log on to our website—www.nelfc.com