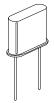


## Pletronics, Inc.

19013 36th Ave. W, Suite H • Lynnwood, WA 98036 USA Manufacturer of High Quality Frequency Control Products

## **MP49** Crystal

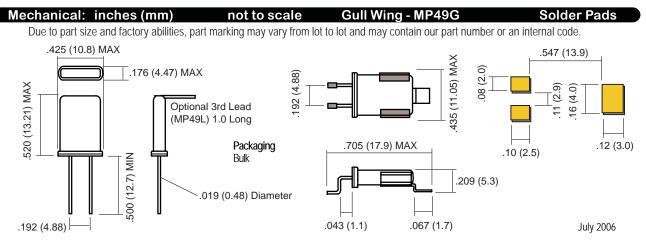
- HC-49U Metal Thru-Hole Crystal
- Available as Gull Wing SMD or with Pull-Down Pin on Top of Can



## 1.8432 MHz - 210.00 MHz

## Standard Specifications Calibration Frequency Tolerance at 25 °C ± 30 PPM is standard, tighter tolerances available **Operating Temperature Range (OTR)** 0 to +70°C is standard, but can be extended to -40 to +85°C Frequency Stability (FS) over OTR ± 50 PPM is standard, see below for tighter tolerances available per OTR options Drive Level 50 µW is standard, customer may specify $\pm$ 5 PPM per year is standard, customer may specify $\pm$ 1 PPM Aging at 25°C Shunt Capacitance 7 pF maximum **Temperature Range Tightest FS** Pullability -10 to +60°C ± 3 PPM May be specified by customer in terms of frequency shift required ± 5 PPM -20 to +70°C over a certain range of load capacitance -30 to +80°C ± 10 PPM (e.g. +100 PPM from CL=12 to CL=18 pF) or as motional capacitance (fF) -40 to +85°C ± 20 PPM **Part Numbering Guide ESR Values** Portions of the part number that appear after the frequency may not be marked on part (C of C provided) Oscillation Frequency Range Maximum SR MP49 B E - xx - 70.0M - IN XXX (Internal Code or blank) ESR (Ohms) Mode (MHz) **Fundamental** 1.8432 - 2.999 700 Options IN = Insulator AT Cut 3.000 - 3.999 150 Series Resonance TR = Paper Tape & Reel 4.000 - 6.999100 7.000 - 9.999 50 Model 10.000 - 37.000 25 Frequency in MHz Load Capacitance 3rd Overtone 21.000 - 90.000 40 Cal Tol / Freq Stability Parallel Resonance in pF (3 10 pF) AT Cut Blank = 30/50**Temperature Range & Special Mechanical** 5th Overtone 60.000 -150.000 70 B = 30/30Blank: 0 to +70°C C = 15/30F: - 40 to +85°C 7th Overtone 85.000 -210.000 100 D = 10/20 (consult factory) H: - 20 to +70°C Consult factory for lower ESR G: Gull Wing Surface Mount Package L: 3rd Lead (Pull-down pin) on top of can V: Vinyl Sleeve Insulation

Consult factory for available frequencies and specs. Not all options available for all frequencies. A special part number may be assigned.



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