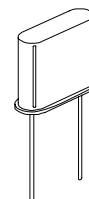




Pletronics, Inc.

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

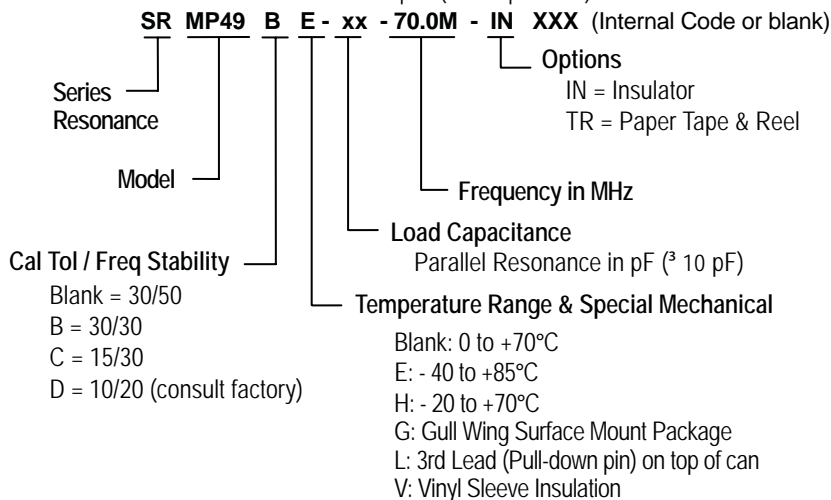
Standard Specifications

| | |
|--|--|
| 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 |
| Aging at 25°C | ± 5 PPM per year is standard, customer may specify ± 1 PPM |
| Shunt Capacitance | 7 pF maximum |

| Pullability | Temperature Range | Tightest FS |
|---|-------------------|-------------|
| May be specified by customer in terms of frequency shift required over a certain range of load capacitance (e.g. +100 PPM from CL=12 to CL=18 pF) or as motional capacitance (f F) | -10 to +60°C | ± 3 PPM |
| | -20 to +70°C | ± 5 PPM |
| | -30 to +80°C | ± 10 PPM |
| | -40 to +85°C | ± 20 PPM |

Part Numbering Guide

Portions of the part number that appear after the frequency may not be marked on part (C of C provided)



ESR Values

| Oscillation Mode | Frequency Range (MHz) | Maximum ESR (Ohms) |
|------------------|-----------------------|--------------------|
| Fundamental | 1.8432 – 2.999 | 700 |
| AT Cut | 3.000 – 3.999 | 150 |
| | 4.000 – 6.999 | 100 |
| | 7.000 – 9.999 | 50 |
| | 10.000 – 37.000 | 25 |
| 3rd Overtone | 21.000 – 90.000 | 40 |
| AT Cut | | |
| 5th Overtone | 60.000 – 150.000 | 70 |
| 7th Overtone | 85.000 – 210.000 | 100 |

Consult factory for lower ESR

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

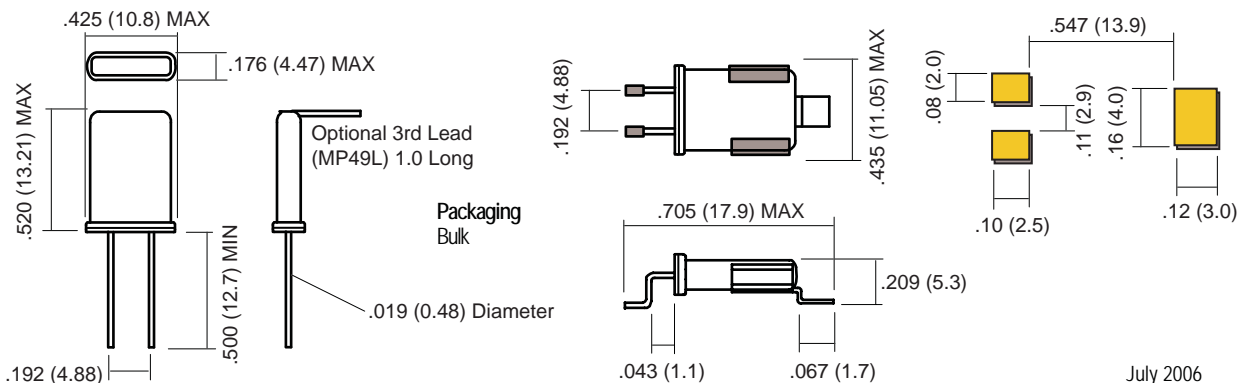
Mechanical: inches (mm)

not to scale

Gull Wing - MP49G

Solder Pads

Due to part size and factory abilities, part marking may vary from lot to lot and may contain our part number or an internal code.



July 2006