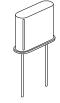
Pletronies, Inc.

19013 36th Ave. West • Suite H • Lynnwood, WA 98036, USA

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 Operating Temperature Range (OTR) Frequency Stability (FS) over OTR Drive Level

Aging at 25°C **Shunt Capacitance** Pullahilit

± 30 PPM is standard, tighter tolerances available

0 to +70°C is standard, but can be extended to -40 to +85°C

± 50 PPM is standard, see below for tighter tolerances available per OTR options 50 mW is standard, customer may specify

± 5 PPM per year is standard, customer may specify ± 1 PPM

7 pF maximum

Pullability	Temperature Range	Tightest FS
May be specified by customer in terms of frequency shift required	-10 to +60°C	± 3 PPM
over a certain range of load capacitance	-20 to +70°C	± 5 PPM
(e.g. +100 PPM from CL=12 to CL=18 pF) or as motional capacitance (f F)	-30 to +80°C	± 10 PPM
(org. 1100 11 m nom of 12 to of 10 pr) or as motional supusitance (11)	-40 to +85°C	± 20 PPM

SR MP49 E -- xx -- 70.0M --IN Series — **Options** Resonance IN=Insulator TR=Paper Tape & Reel Model -PN=Put on Pads Frequency in MHz Parallel Resonance **Special Specifications** Load Capacitance in pF (≥ 8 pF) (choose all that apply) Blank: Std Specs (0 to +70°C)

Part Numbering Guide

E: Extended Operating Temperature Range (- 40 to +85°C)

G: Gull Wing Surface Mount Package

L: 3rd Lead (Pull-down pin) on top of can

V: Vinyl Sleeve Insulation

	ESR Values	
Oscillation Mode	Frequency Range (MHz)	
undamental	1.8432 - 2.999	

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 AT Cut	21.000 - 90.000	40
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.

.425 (10.8) MAX .547 (13.9) 435 (11.05) MAX (2.0).176 (4.47) MAX (4.88)(4.0)6 520 (13.21) MAX <u>0</u> 92 Optional 3rd Lead 16 (MP49L) 1.25 Long **Packaging** .705 (17.9) MAX .12(3.0).10 (2.5) Bulk 500 (12.7) MIN .209 (5.3) .019 (0.48) Diameter .067 (1.7) .043 (1.1) .192 (4.88) May 2002