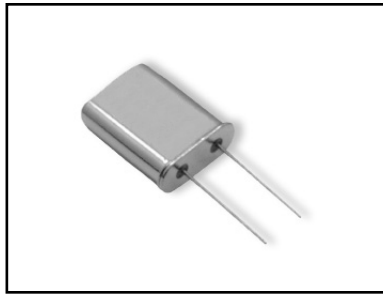


# FMXMA SERIES

Microprocessor Crystals

## HC-49/U



- Low Cost Crystals
- Thru-Hole Package
- Multiple Package Heights
- Surface Mount Lead Forming

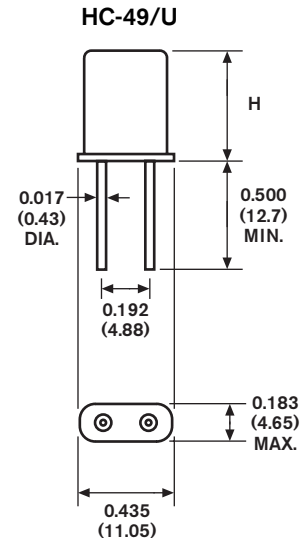


### SPECIFICATIONS

08 - Issue 4 - 071508

Parameter	Specification
Frequency Range	1.8 - 180 MHz
Operation Mode	See Operation Mode and ESR Table
Load Capacitance (CL)	18 pF Std., 8 to 60 pF and Series available
Frequency Tolerance	±30 ppm @ 25°C Std. (See Cal. Tol. for Options)
Temperature Tolerance	±50 ppm Std. (See Temp. Tol. for Options)
Operating Temperature	0 to +70°C Std. (See Temp. Range for Options)
Storage Temperature	-55 to +125°C
Equivalent Series Resistance (ESR)	See Operation Mode and ESR Table
Shunt Capacitance (C0)	7 pF max.
Drive Level	50 µW typical, 1 mW max.
Aging @ 25°C	±5 ppm per year max.

All specifications subject to change without notice.



#### OPERATION MODE AND ESR TABLE

Frequency (MHz)	Mode	Max. ESR (Ohms)
1.8 - 1.9	Fundamental	650
2.0 - 2.3	Fundamental	550
2.4 - 2.9	Fundamental	350
3.0 - 3.6	Fundamental	200
3.7 - 4.1	Fundamental	100
4.2 - 4.8	Fundamental	70
4.9 - 5.9	Fundamental	50
6.0 - 7.9	Fundamental	40
8.0 - 9.9	Fundamental	35
10.0 - 27.0	Fundamental	25
24.0 - 29.0	3rd Overtone	60
30.0 - 80.0	3rd Overtone	40
50.0 - 99.0	5th Overtone	90
100.0 - 180.0	5th Overtone	110

#### STANDARD MARKING

XXX.XXXM  
XXXXXXX  
FMI YYWW

XXX.XXXM FREQUENCY in MHz  
XXXXXXX Part Number  
FMI, Date Code

#### DIMENSION "H" TABLE

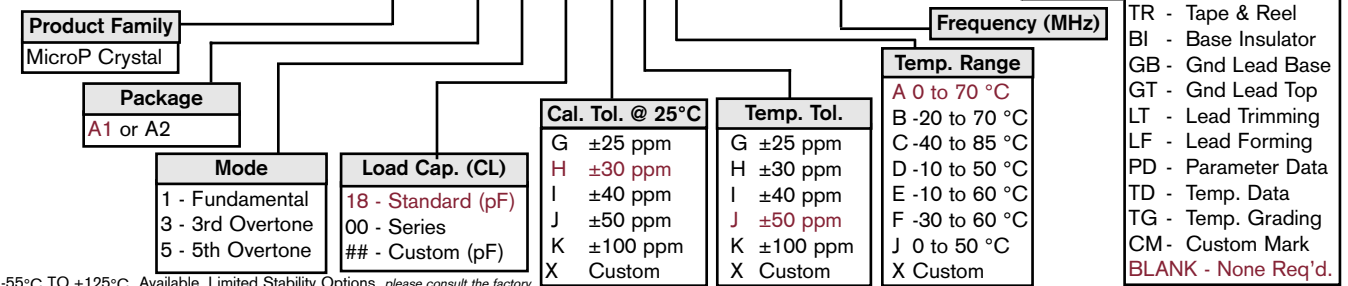
Package	Max. Height
A1	0.530" (13.46mm)
A2	0.426" (10.82mm)

**NOTE: Standard Specifications for product indicated in color**

Dimensions:  $\frac{\text{Inches}}{\text{(mm)}}$

### PART DESCRIPTION SYSTEM

**FMXM A1 1 18 H J A - XX.XXXXXXM - CM**



-55°C TO +125°C Available, Limited Stability Options, please consult the factory.