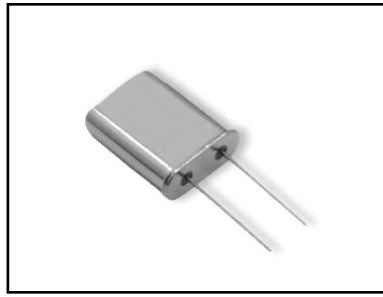


FMXTA SERIES

Communications Crystals

HC-49/U



- Tight Stability
- Thru-Hole Package
- Multiple Package Heights
- Surface Mount Lead Forming

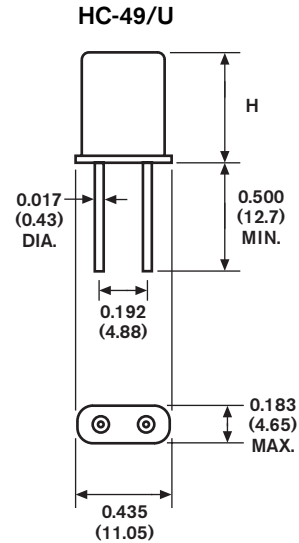


SPECIFICATIONS

08 - Issue 4 - 071508

Parameter	Specification
Frequency Range	1.8432 - 180.0 MHz
Operation Mode	See Operation Mode and ESR Table
Load Capacitance (CL)	18 pF Std., 8 to 60 pF and Series available
Frequency Tolerance	±10 ppm @ 25°C Std. (See Cal. Tol. for Options)
Temperature Tolerance	±10 ppm Std. (See Temp. Tol. for Options)
Operating Temperature	-10 to +60°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 uW typical, 1 mW max.
Aging @ 25°C	±3 ppm per year max.

All specifications subject to change without notice.



OPERATION MODE AND ESR TABLE

Frequency (MHz)	Mode	Max. ESR (Ohms)
1.8432 - 2.9	Fundamental	400
3.0 - 3.2	Fundamental	150
3.3 - 3.4	Fundamental	90
3.5 - 6.9	Fundamental	50
7.0 - 9.9	Fundamental	30
10.0 - 14.9	Fundamental	25
15.0 - 35.0	Fundamental	20
24.0 - 67.9	3rd Overtone	40
68.0 - 85.0	3rd Overtone	60
60.0 - 89.9	5th Overtone	50
90.0 - 125.0	5th Overtone	60
125.1 - 180.0	5th Overtone	90

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	0.456" (11.58mm)

NOTE: Standard Specifications for product indicated in color

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

PART DESCRIPTION SYSTEM

FMXT A1 1 18 D D E - XXX.XXXXXXM - CM

Product Family
Comm. Grade Xtals

Package
A1 or A2

Mode
1 - Fundamental
3 - 3rd Overtone
5 - 5th Overtone

Load Cap. (CL)
18 - Standard (pF)
00 - Series
- Custom (pF)

Cal. Tol. @ 25°C
B ±5.0 ppm
C ±7.5 ppm
D ±10 ppm
E ±15 ppm
F ±20 ppm
G ±25 ppm
X Custom

Temp. Tol.
A ±2.5 ppm
B ±5.0 ppm
C ±7.5 ppm
D ±10 ppm
E ±15 ppm
F ±20 ppm
G ±25 ppm
X Custom

Temp. Range
A 0 to 70 °C
B -20 to 70 °C
C -40 to 85 °C
D -10 to 50 °C
E -10 to 60 °C
F -30 to 60 °C
J 0 to 50 °C
X Custom

Frequency (MHz)

Options
TR - Tape & Reel
BI - Base Insulator
GB - Gnd Lead Base
GT - Gnd Lead Top
LT - Lead Trimming
LF - Lead Forming
PD - Parameter Data
TD - Temp. Data
TG - Temp. Grading
CM - Custom Mark
BLANK - None Req'd.

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