

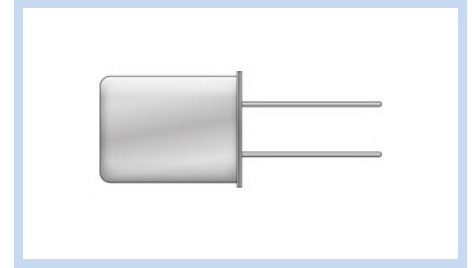
# HC-49U Crystal Unit

MXF series

**MERITEK**

## FEATURE

- Wide Frequency Range
- Resistance Welded
- High precision and high frequency stability
- Applications: Data Application, Computer Machines, Printers, CPU, Memory, Test Equipment, Large Pullability Applications



## PART NUMBERING SYSTEM

MXF F H J C 1M8432  
 (1) (2) (3) (4) (5) (6)

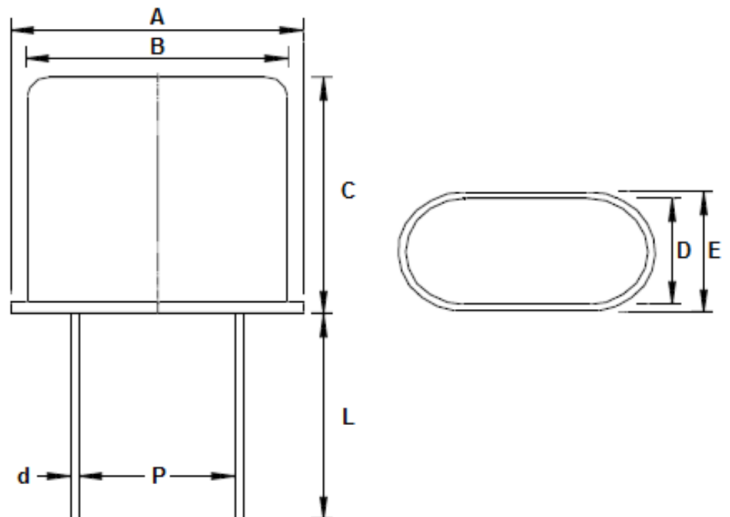


No	Item	Code	Description	Series Reference
(1)	Meritek Series	MXF	Crystal Unit	HC-49U
(2)	Load Capacitance	F	F: 20pF	E: 18pF, R: Series Resonance (see options)
(3)	Frequency Tolerance	H	H: ±30ppm	F: ±20ppm, G: ±25ppm (see options)
(4)	Stability vs Oper Temp.	J	J: ±50ppm	G: ±25ppm, H: ±30ppm (see options)
(5)	Operating Temp.	C	C: -20~+70°C	C: -20~+70°C, I: -40~+85°C (see options)
(6)	Frequency	1M8432	1M8432: 1.8432 MHz	1M8432 ~ 200M0 (M denotes decimal point)

## DIMENSIONS AND RECOMMENDED PATTERN

Item	Size	Item	Size
A	11.5 max.	E	5.0 max.
B	10.3 max.	d	0.457 max.
C	13.46 max.	p	4.88±0.20
D	3.8 max.	L	12.7 min.

(Unit: mm)



## AVAILABLE OPTIONS

Parameters	Part Number Options
Load Capacitance	R: Series Resonance, 3: 3pF ~ 8: 8pF, A: 10pF, B: 12pF, C: 15pF, D: 16pF, E: 18pF, F: 20pF, K: 22pF, G: 25pF, H: 30pF, L: 32pF
Frequency Tolerance	A: ±10ppm, C: ±15ppm, F: ±20ppm, G: ±25ppm, H: ±30ppm, J: ±50ppm
Stability vs Oper Temp.	A: ±10ppm, C: ±15ppm, F: ±20ppm, G: ±25ppm, H: ±30ppm, J: ±50ppm, K: ±100ppm
Operating Temperature	B: 0~+70°C, A: -10~+60°C, C: -20~+70°C, K: -30~+85°C, I: -40~+85°C, R: -40~+105°C

Note: Custom options available. Contact Meritek for more information.

## ELECTRICAL CHARACTERISTICS

Parameters		Characteristic
Nominal Frequency Range		1.8432 ~ 200.000 MHz
Operation Mode	Fundamental	1.8432 ~ 40.000 MHz
	3 <sup>rd</sup> Overtone	40.001 ~ 100.000 MHz
	5 <sup>th</sup> Overtone	100.001 ~ 150.000 MHz
	7 <sup>th</sup> Overtone	150.001 ~ 200.000 MHz
Load Capacitance		18.0 pF (see options)
Frequency Tolerance (at 25°C)		±30 ppm (see options)
Freq Stability over Oper Temp.		±50 ppm (see options)
Operating Temperature		-20 ~ +70°C (see options)
Storage Temperature		-55 ~ +125°C
Drive Level		1 mW max. (100 µW typ.)
Aging		±5 ppm / year
Shunt Capacitance		7.0 pF max.
Insulation Resistance		500 MΩ min. (@100Vdc ±15V)
Drive Level Dependency (DLD)		1 µW ~ 500 µW (min. 7 points tested)
Equivalent Series Resistance	1.8432 ~ 1.999 Fund.	750 Ω max.
	2.0 ~ 2.399 Fundamental	550 Ω max.
	2.4 ~ 2.999 Fundamental	350 Ω max.
	3.0 ~ 3.699 Fundamental	200 Ω max.
	3.7 ~ 4.199 Fundamental	100 Ω max.
	4.2 ~ 4.899 Fundamental	70 Ω max.
	4.9 ~ 5.999 Fundamental	50 Ω max.
	6.0 ~ 7.999 Fundamental	40 Ω max.
	8.0 ~ 9.999 Fundamental	35 Ω max.
	10.0 ~ 12.499 Fundamental	30 Ω max.
	12.5 ~ 40.400 Fundamental	25 Ω max.
	40.001 ~ 100.000 3 <sup>rd</sup> OT	40 Ω max.
	100.001 ~ 150.000 5 <sup>th</sup> OT	80 Ω max.
120.001 ~ 200.000 7 <sup>th</sup> OT	120 Ω max.	

\*Specifications subject to change without notice.