



QUARTZ CRYSTALS UNIT  
**LOW PROFILE CRYSTALS**  
 HEX14 - HC-49US & HC-49US-3



**FEATURES**

- Wide Frequency Range
- High Precision Availability
- High Reliability
- Tight Stability & Extended Temperature Available.
- Communication & Microprocessor Crystals

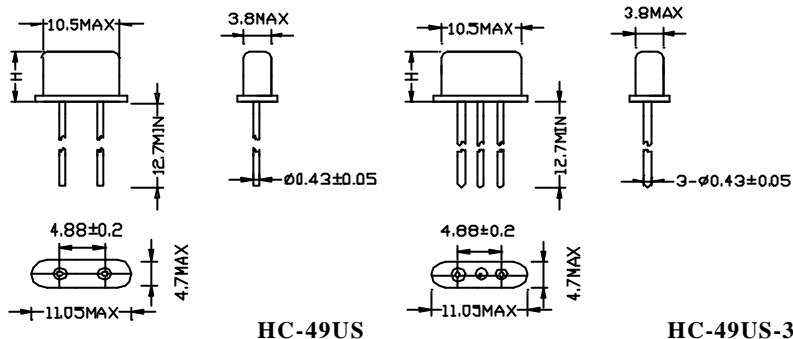
**ALTERNATIVE CODE:**

- N for STD Package
- 3L for HC-49US -3 Lead Base

PARAMETER	SPECIFICATION
Frequency Range	3.200 ~ 70.000 MHz
Mode of Oscillation	Fund 3.200 ~ 40.000 MHz 3 rd overtone 24.000 ~ 70.000 MHz
Operating Temperature	0 ~ 70 ( See Options )
Storage Temperature	-40 ~ +85
Frequency Tolerance @ 25	± 10ppm~ ± 50ppm ( See Options )
Frequency Stability Over Temp.	± 50ppm ( See Options ) ± 100ppm max. @ -10 ~60 (FB)
Shunt Capacitance C <sub>0</sub>	7.0pF max
Load Capacitance C <sub>L</sub>	8pF~50pF or SR
Drive Level	100uW Typical ( 1mW max )
Ageing @ 25 Per Year	± 3ppm~ ± 5ppm
Insulation Resistance	500M min .at 100Vdc ± 15V

“ H ” Dimension Table			
	A	B	C
HC-49US	2.5	3.0	3.5
HC-49US-3	2.5	3.0	3.5

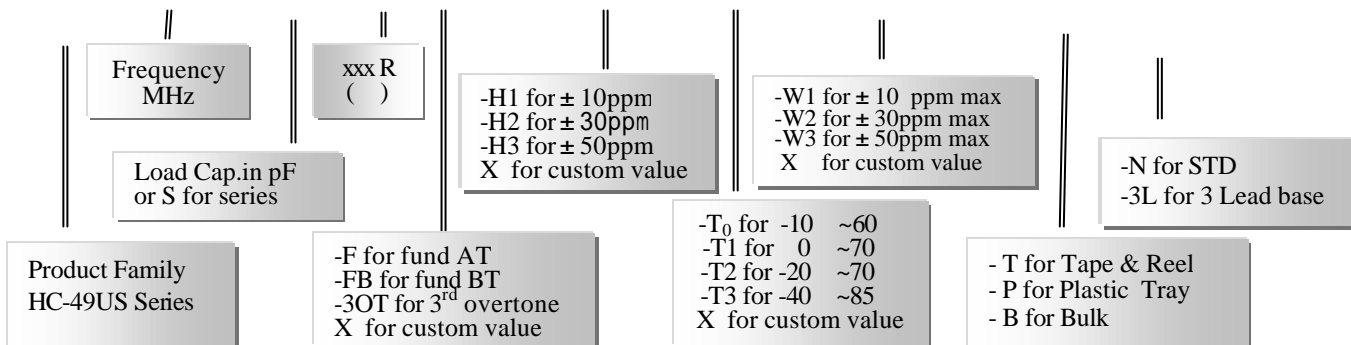
Equivalent Series Resistance(ESR) and Mode of Vibration(Mode)					
Frequency Range(MHZ)	Max ESR(Ω)	Mode	Frequency Range(MHZ)	Max SR(Ω)	Mode
4.000 ~ 4.999	140	Fund	13.000 ~ 40.000	40	Fundamental
5.000 ~ 5.999	120	Fund	24.000 ~ 29.999	70	3 <sup>rd</sup> overtone
6.000 ~ 7.999	100	Fund	30.000 ~ 70.000	50	3 <sup>rd</sup> overtone
7.999 ~ 9.999	70	Fund			



Dimensions : **mm**

**PART NUMBERING - ORDERING OPTIONS:**

HEX14 - Frequency - CL - ESR - Mode - Freq. Tol. - Temp. Range - Stability - Packaging - Option  
 HEX14 - Frequency - CL - ESR - Mode - Freq. Tol. - Temp. Range - Stability - Packaging - Option



Part Numbering Example : HEX14-12.000MHZ-18-180R-F-H2-T2 -W2-B-N