

Crystal Unit

Hermetical Case

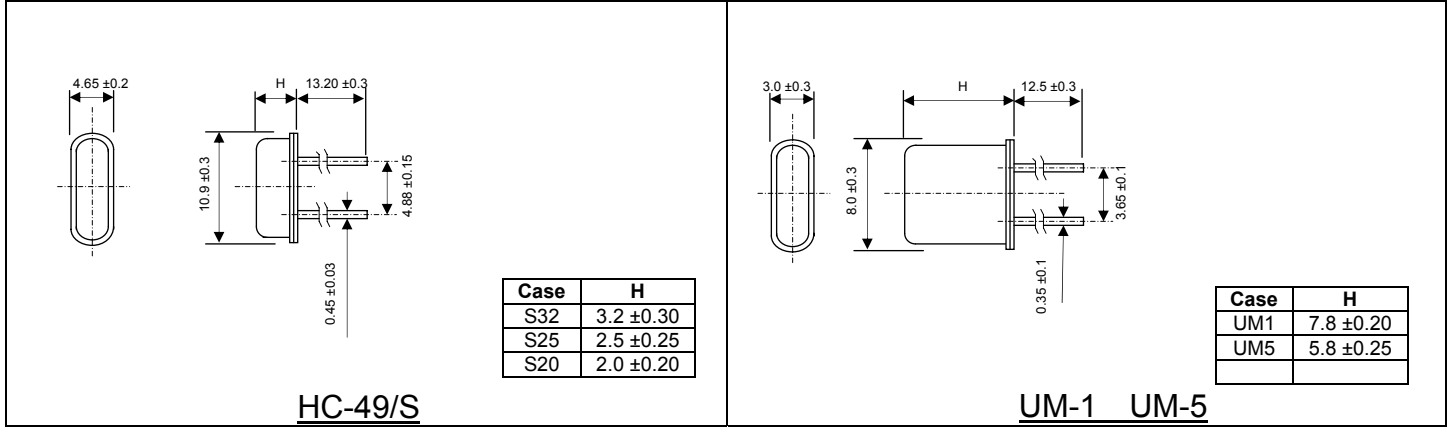
HC Series

Feature & Applications:

- Universal purposes
- Hermetical sealed RoHS Compliant
- Low cost

Outline Drawing

Dimension (Unit=mm)



General Characteristics

Parameter	Case	HC-49/S	UM-1	UM-5
Frequency Range		3.5 MHz to 110 MHz	8MHz to 200MHz	
Frequency Tolerance @25°C		± 30 ppm		±10 ppm
Frequency Drift vs Operating Temperature		± 50 ppm refer to 25°C		±10 ppm refer to @25°C
Operating Temperature		-10°C to +60°C (Standard), or custom		
Storage Temperature		-20°C to +70°C		
Load Capacitance		8pF to 33pF or Series (∞)		
Equivalent Series of Resistance		see Table 1		
Shunt Capacitance		5pF max.(≤18MHz) 7pF max. (>18MHz)		
Drive Level		200μW max (≤5MHz)	100μW max (>5MHz)	100μW max
Insulation Resistance		500MΩ min / 100VDC		
Aging @25°C		±5ppm per year		

Part Number Guide:

X - 13.1465 - S32 - 18 - 50 - 100A - 40 - 100 - A1 - 5 - N
 Xtal Frequency Case Type CL Freq.Tol Drift/Temp ESR DL Osc.Mode Shunt Cap Option
 (MHz) S32=49/S H:3.2mm 18=18pF (ppm) (ppm) (Ω max) (μWmax) A1=Fund. (pFmax) N=None
 00=∞ A=-10~+60°C A3=3 O/T LL2.8=Lead Length
 B=-20~+70°C TR=Tape&Reel
 TA=Tape&Ammo
 G=RoHS compliant

TABLE 1

Equivalent Series of Resistance Table

Case	Vibration Mode	HC-49/S ΩMax	UM-1 ΩMax	UM-5 ΩMax
1.0-1.8MHz	F	-	-	-
1.8-2.00MHz	F	-	-	-
2.01-2.399MHz	F	-	-	-
2.4-2.99Mhz	F	-	-	-
3.0-3.5MHz	F	-	-	-
3.5-3.99MHz	F	150	-	-
4.0-4.99MHz	F	120	-	-
5.0-5.99MHz	F	100	-	-
6.0-6.99MHz	F	80	-	-
7.0-7.99MHz	F	80	-	-
8.0-9.99MHz	F	70	-	-
10-13.99MHz	F	50	30	30
14-23.99MHz	F	40	25	25
24-25.0MHz	F/3	40/80	20/40	20/40
25-30.0MHz	F/3	40/80	20/40	20/40
30-75.0MHz	3	80	40	40
75-125.0MHz	5	-	50	50
125-150MHz	5	-	60	60
150-200MHz	5	-	80	80

Other combination is available