

HC-49S Series



Description:

- Low Cost
- Wide Frequency Range
- Excellent Aging
- AT or BT Cut Crystal
- Consumer Electronic Products
- Industrial Equipment
- Military Equipment
- Communication Equipment

Performance Characteristics

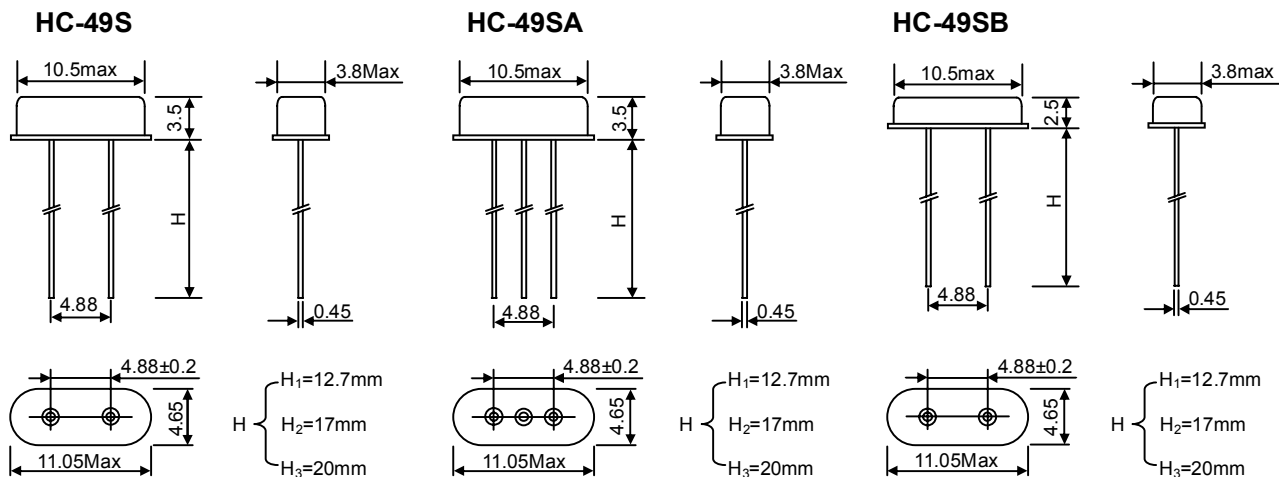
Parameter		HC-49S	HC-49SA	HC-49SB
Frequency Range (MHz)	F ₀	3.579~40.000	20.000~40.000	24.000~70.000
Mode of Vibration		AT Fundamental	BT Fundamental	3rd Overtone
Resonance Resistance (Ω)	R _r	30~180	40	30~120
Frequency Tolerance (at 25°C)		±3×10 ⁻⁶ ~±30×10 ⁻⁶		
Storage Temperature Range	T _{STG}	-55°C~+125°C		
Shunt Capacitance	C ₀	7pF Max		
Load Capacitance	CL	6pF~50pF or Series		
Insulation Resistance	IR	>500MΩ DC/100V±10V		
Drive Level	DL	0.01mW~0.1mW		
Aging	Fa	±3×10 ⁻⁶ ~±5×10 ⁻⁶ /year		

Frequency Stability Over Temperature Range

Temperature Range	Frequency Stability				
	O:±10×10 ⁻⁶	P:±15×10 ⁻⁶	Q:±20×10 ⁻⁶	S:±30×10 ⁻⁶	T:±50×10 ⁻⁶
A:0°C~+50°C	●	●	●	●	●
B:-10°C~+60°C	●	●	●	●	●
C:-20°C~+70°C		●	●	●	●
G:-40°C~+85°C		●	●	●	●
J:-55°C~+125°C					※

※: Specially designated products.

Outline Drawing (mm)



Crystal Units Ordering Information

HC-49U	—	C	20	S	S	A	—	1.8432
Package	Operating Temperature Range	Load Capacitance	Frequency Tolerance	Frequency Stability	Vibration Mode	Nominal Frequency (MHz)		
HC-49U	A=0°C~+50°C	00=series	$M=\pm 3 \times 10^{-6}$	$M=\pm 3 \times 10^{-6}$	A=AT-Fund	Please enter the nominal frequency		
HC-49UX	B=-10°C~+60°C	06=6.0pF	$N=\pm 5 \times 10^{-6}$	$N=\pm 5 \times 10^{-6}$	B=BT-Fund			
HC-33U	C=-20°C~+70°C	08=8.0pF	$O=\pm 10 \times 10^{-6}$	$O=\pm 10 \times 10^{-6}$	T=3 RD			
HC-49S	G=-40°C~+85°C	10=10pF	$P=\pm 15 \times 10^{-6}$	$P=\pm 15 \times 10^{-6}$	F=5 TH			
HC-49SA	J=-55°C~+125°C	12=12pF	$Q=\pm 20 \times 10^{-6}$	$Q=\pm 20 \times 10^{-6}$	TA=AT-3 RD			
HC-49SB		16=16pF	$S=\pm 30 \times 10^{-6}$	$S=\pm 30 \times 10^{-6}$	FA=AT-5 TH			
HC-49XA		20=20pF	$T=\pm 50 \times 10^{-6}$	$T=\pm 50 \times 10^{-6}$				
HC-49XB		30=30pF		$U=\pm 100 \times 10^{-6}$				
X53F		50=50pF						
X63F		Please enter the value of load capacitance						
X75F								
X53T								
X63T								
UM-1								
UM-5								
AT-38								
AT-39								

DT-26	—	C	06	Q	—	32.768
Package	Operating Temperature Range	Load Capacitance	Frequency Tolerance (25°C)	Nominal Frequency (KHz)		
DT-26	A=0°C~+50°C	06=6.0pF	$N=\pm 5 \times 10^{-6}$	Please enter the nominal frequency		
DT-38	B=-10°C~+60°C	08=8.0pF	$O=\pm 10 \times 10^{-6}$			
MC306	C=-20°C~+70°C	10=10.0pF	$P=\pm 15 \times 10^{-6}$			
	G=-40°C~+85°C	12=12.5pF	$Q=\pm 20 \times 10^{-6}$			
		Please enter the value of load capacitance	$S=\pm 30 \times 10^{-6}$			
			$T=\pm 50 \times 10^{-6}$			
			$U=\pm 100 \times 10^{-6}$			