

HC-49/U, HC-49/U(SMD)

CRYSTAL SMD DIF



TYPICAL APPLICATIONS

Microprocessor Clock, Network Card, Cable Modems, ADSL, ISDN, Network Processor, A/V Card, Security System

FEATURES

High Reliable Resistance Sealed, Lead-free, Tight Tolerance and Stability, RoHS Compliant Standard



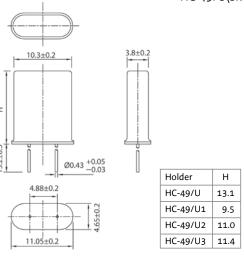
TYPICAL SPECIFICATIONS

Model	HC-49/U, HC-49/U(SMD)		
Nominal Frequency Range	1.500~30.0MHz	20.0~90.0MHz	70.0~160.0MHz
Standard Frequency	3.57954, 4, 8, 24, 27, 120MHz		
Vibration Mode	Fundamental [AT]	3rd Overtone [AT]	5th Overtone [AT]
Frequency Tolerance (@ +25°C)	$\pm 10, \pm 15, \pm 20, \pm 30, \pm 50 \text{ ppm}$		
Freq. Temp. Characteristics	±30 ppm		
(Ref. to 25°C)			
Operating Temperature Range	-10°C~+60°C		
Storage Temperature Range	-40°C~+90°C		
Load Capacitance	Series, 16pF, 20pF, 30pF		
Shunt Capacitance	7pF Max.		
Drive Level	10μW (1000μW Max.)		
Equivalent Series Resistance	See Table 1		
Aging (+25°C)	±3, ±5 ppm / year Max.		

Please consult with our sales department for other parameters.

OUTLINE DIMENSIONS Unit:mm

HC-49/U(DIP)



HC-49/U(SMD)

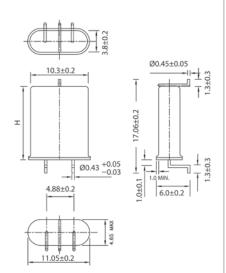


TABLE 1: ESR

AT-cut Fundamental		
Frequency (MHz)	$ESR(\Omega)$	
1.5~1.99	700	
2.0~2.99	500	
3.0~3.19	200	
3.2~3.99	150	
4.0~4.49	90	
4.5~4.99	70	
5.0~6.99	50	
7.0~9.99	35	
10.0~30.00	25	

AT-cut 3rd Overtone		
Frequency (MHz)	$ESR(\Omega)$	
20.0~24.99	45	
25.0~90.00	40	

AT-cut 5th Overtone		
Frequency (MHz)	$ESR(\Omega)$	
70.0~160.0	70	

All specifications are subject to change without notice.

^{*} Package quantity 1,000 pcs max./reel.