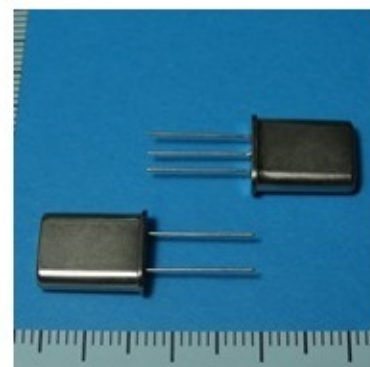
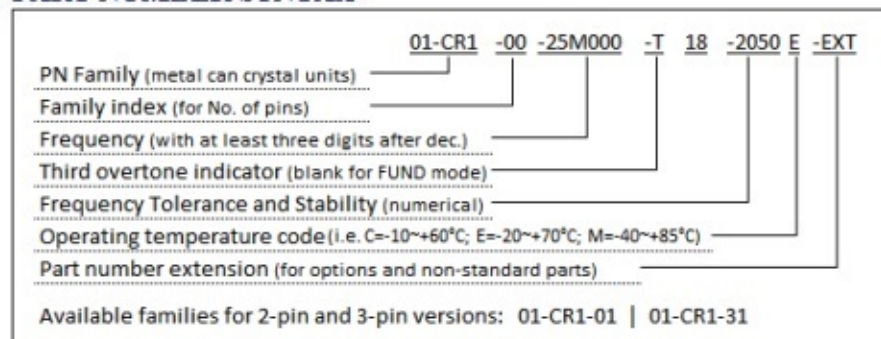


QUARTZ CRYSTAL UNITS IN HC-49/U PACKAGE

PART NUMBER SYNTAX



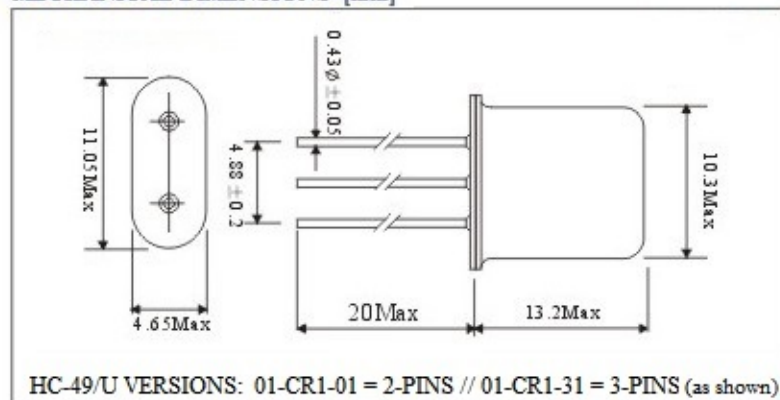
PRODUCT SPECIFICATIONS

Frequency Range (Fo)	1.8432MHz ~ 90.000MHz						
Frequency Tolerance at 25°C ($\Delta f/f_0$)	±30ppm(typ)	±10ppm	±15ppm	±50ppm	±30ppm	±50ppm	±50ppm
Temperature Stability(REF To 25°C)	±30ppm(typ)	±10ppm	±30ppm	±50ppm	±30ppm	±50ppm	±100ppm
Operating Temperature Range (T _{OPR})	-20°C to 70°C				-40°C to 85°C		
Storage Temperature Range (T _{STG})	-40°C to 85°C						
Shunt Capacitance (C ₀)	7pF Max						
Load Capacitance (C _L)	10 to 32pF or Series Resonant						
Insulation Resistance	500 Mega ohms Minimum at 100VDC						
Drive Level	0.1MW						
Aging(at 25°C)	±5ppm/year Max						

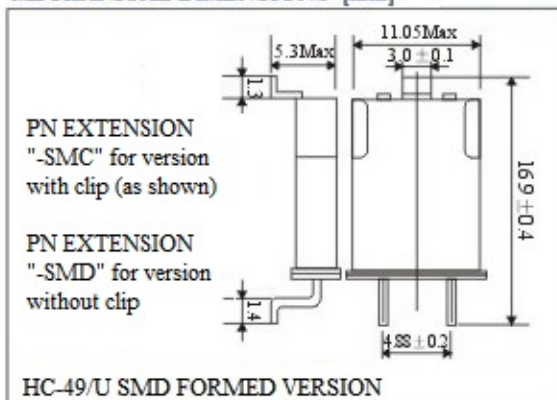
EQUIVALENT SERIES RESISTANCE ESR

Frequency Range	Max ESR(Ω)	Mode	Frequency Range	Max ESR(Ω)	Mode
1.800MHz to 1.999MHz	800	Fundamental	6.000MHz to 7.999MHz	35	Fundamental
2.000MHz to 2.999MHz	500	Fundamental	8.000MHz to 12.999MHz	25	Fundamental
3.000MHz to 3.499MHz	60	Fundamental	13.000MHz to 30.999MHz	20	Fundamental
3.500MHz to 3.999MHz	50	Fundamental	24.000MHz to 29.999MHz	60	Third overtone
4.000MHz to 4.999MHz	50	Fundamental	30.000MHz to 90.000MHz	40	Third overtone
5.000MHz to 5.999MHz	40	Fundamental			

MECHANICAL DIMENSIONS [mm]



MECHANICAL DIMENSIONS [mm]



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