

STANDARD MICROPROCESSOR UNITS

Typical Electrical Characteristics

Frequency Range : 1.0 MHz to 350.0 MHz

Calibration Tolerance @ 25° : ± 50 ppm

Operating Temperature Range : -20° to 70° C

Calibration Tolerance Over Operating Temperature Range : ± 50 ppm

Available Holders : HC-49U, HC-45U(UM-1),
HC-51U/HC-33U, HC-49US, (3rd lead optional)

AVAILABLE CRYSTAL UNITS

Nominal Frequency (MHz)

1.0 – 50.0
30.0– 150.0
50.0– 250.0
70.0– 350.0
50.0– 150.0

Mode of Operation

Fundamental
3rd Overtone
5th Overtone
7th Overtone
Fundamental
(Special Applications)

Frequency Tolerance

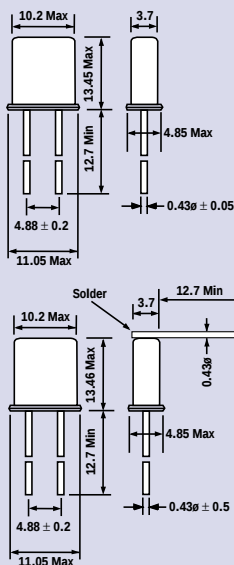
A = ± 5 ppm
B = ± 10 ppm
C = ± 20 ppm
D = ± 30 ppm
E = ± 50 ppm
F = ± 100 ppm

Operating Temp Range

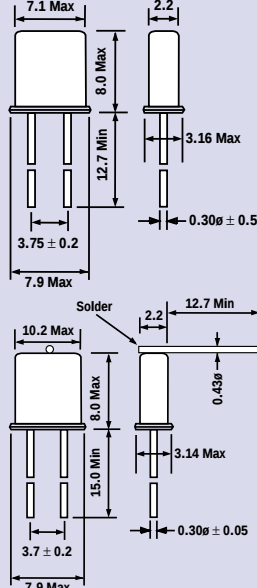
G = 0°C to 50°C
H = -10°C to 60°C
I = -20°C to 70°C
J = -30°C to 80°C
K = -40°C to 85°C
L = -55°C to 105°C

AVAILABLE CRYSTAL PACKAGES

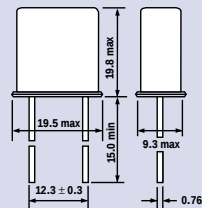
Package # HA (HC-49U)



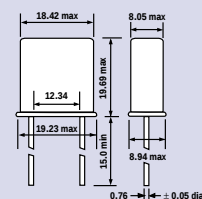
Package # U1 (UM-1)



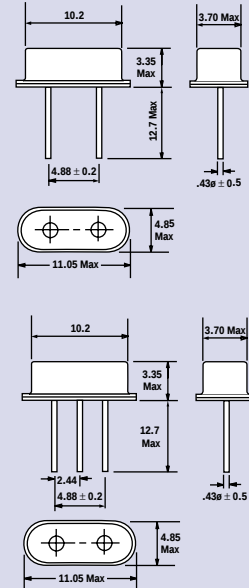
Package # H3 (HC-33U)



Package #H3 (HC-51U)



Package # L4 (HC-49S)



STANDARD CRYSTALS

STANDARD HC-49U CRYSTALS

Nominal Frequencies (MHz)	Load Capacity (pF)	Equiv. Series Res	Mode of Oper	PDI Part Number	Package Number	Nominal Frequencies (MHz)	Load Capacity (pF)	Equiv. Series Rs	Mode of Oper	PDI Part Number	Package Number
1.843200	13	350	Fund	7193	HA	9.830400	20	35	Fund	7204	HA/L4
1.843200	series	350	Fund	7386	HA	9.830400	series	35	Fund	8205	HA/L4
2.000000	20	300	Fund	8189	HA	10.000000	series	35	Fund	7132	HA/L4
2.000000	series	300	Fund	8190	HA	10.738635	series	35	Fund	7359	HA/L4
2.457600	32	250	Fund	7995	HA	11.000000	series	35	Fund	8206	HA/L4
2.500000	series	300	Fund	8191	HA	11.046000	series	35	Fund	8208	HA/L4
3.000000	series	150	Fund	8192	HA	11.059200	series	35	Fund	7371	HA/L4
3.276800	15	200	Fund	8194	HA	11.059200	20	35	Fund	7382	HA/L4
3.579545	18	150	Fund	7876	HA/L4	11.228000	series	35	Fund	8208	HA/L4
3.579545	series	120	Fund	7168	HA/L4	11.981350	series	35	Fund	8209	HA/L4
3.686400	18	175	Fund	7271	HA/L4	12.000000	series	35	Fund	7107	HA/L4
3.686400	series	120	Fund	7246	HA/L4	12.000000	32	35	Fund	7502	HA/L4
3.932160	18	100	Fund	7059	HA/L4	12.096000	series	35	Fund	8210	HA/L4
4.000000	20	100	Fund	7046	HA/L4	12.288000	series	35	Fund	8211	HA/L4
4.000000	series	100	Fund	8141	HA/L4	12.960000	18	35	Fund	7993	HA/L4
4.032000	20	120	Fund	8195	HA/L4	13.516800	series	35	Fund	8212	HA/L4
4.032000	series	100	Fund	7341	HA/L4	14.318180	series	35	Fund	7031	HA/L4
4.096000	18	100	Fund	7550	HA/L4	14.318180	18	35	Fund	7253	HA/L4
4.194304	12	100	Fund	7097	HA/L4	14.690000	series	35	Fund	8213	HA/L4
4.433618	20	85	Fund	7196	HA/L4	14.745600	series	35	Fund	8095	HA/L4
4.915200	series	70	Fund	7250	HA/L4	15.000000	series	35	Fund	8214	HA/L4
4.915200	20	55	Fund	7343	HA/L4	15.360000	20	50	Fund	8158	HA/L4
5.000000	20	70	Fund	7345	HA/L4	16.000000	series	35	Fund	7817	HA/L4
5.068800	series	70	Fund	7346	HA/L4	16.000312	30	35	Fund	7080	HA/L4
5.068800	20	50	Fund	8196	HA/L4	17.734475	18	35	Fund	8161	HA/L4
5.185000	series	60	Fund	8197	HA/L4	18.000000	series	30	Fund	7367	HA/L4
5.185000	32	50	Fund	8198	HA/L4	18.432000	series	30	Fund	7018	HA/L4
5.990400	series	50	Fund	8199	HA/L4	19.660800	series	30	Fund	7503	HA/L4
5.990400	20	40	Fund	8126	HA/L4	19.660800	20	30	Fund	7194	HA/L4
6.000000	series	50	Fund	7349	HA/L4	20.000000	series	30	Fund	7063	HA/L4
6.000000	32	50	Fund	8200	HA/L4	20.000000	20	30	Fund	7814	HA/L4
6.144000	32	50	Fund	8201	HA/L4	22.118400	series	30	Fund	8215	HA/L4
6.553600	12	40	Fund	8202	HA/L4	24.000000	20	30	Fund	7019	HA/L4
7.372800	series	40	Fund	7048	HA/L4	24.000000	series	30	Fund	7106	HA/L4
7.372800	20	40	Fund	7460	HA/L4	29.491200	18	50	Fund	8055	HA/L4
7.680000	20	40	Fund	8203	HA/L4	26.540000	16	40	3RD	8216	HA/L4
8.000000	series	35	Fund	7005	HA/L4	32.000000	20	35	3RD	7176	HA/L4
8.000000	20	35	Fund	7501	HA/L4	35.251200	18	70	3RD	7268	HA/L4
9.216000	series	35	Fund	8204	HA/L4	39.321600	12	80	3RD	8218	HA/L4