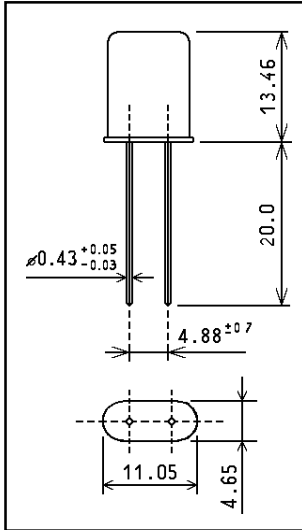


**1.000 MHz ~ 200.000 MHz**


Der HC-49/U ist der klassische Quarz im 13,46 mm hohen Standard-Metallgehäuse.

*HC-49/U is the classical crystal unit in 13.46 mm high standard metal enclosure.*

Die folgend aufgeführten Spezifikationen sind für Mikroprozessor-Anwendungen. Abweichende Spezifikationen, gemäß Kundenwunsch, sind auf Anfrage lieferbar.

*Following specifications are for microprocessor use. Other specifications are also available on request.*

Gehäuse ( <i>Enclosure</i> )	HC-49/U
<b>Nominal Frequency Range</b>	
<b>Fundamental Mode</b>	1,000 ~ 32,000 MHz
<b>3rd Overtone Mode</b>	25,000 ~ 90,000 MHz
<b>5th Overtone Mode</b>	50,000 ~ 150,000 MHz
<b>7th Overtone Mode</b>	70,000 ~ 200,000 MHz
<b>Frequency Tolerance</b>	±30 ppm or ±50 ppm (at 25°C ±3°C)
<b>Temperature Stability</b> (within Operating Temp. Range)	±30 ppm or ±50 ppm (referred to +25°C)
<b>Operating Temperature Range</b>	-10°C ~ +70°C or -40°C ~ +85°C
<b>Storage Temperature Range</b>	-40°C ~ +90°C
<b>Equivalent Series Resistance (R<sub>s</sub>)</b>	s. Table 1
<b>Load Capacitance (C<sub>L</sub>)</b>	10 ~ 30pF, series resonance (Overtone)
<b>Drive Level</b>	0.1 mW typical
<b>Aging (First Year)</b>	±5 ppm / Year max.
<b>Shock Resistance (*Note 1)</b>	±5 ppm max.
<b>Vibration Resistance (*Note 2)</b>	±5 ppm max.
<b>Insulation Resistance</b>	500 MΩ min. at 100 ±15 VDC
<b>Leakage</b>	0.01 ppm atm.cc/sec max.

\*Note 1 (Shock Test Standard):

3 mal von 75cm Höhe auf eine harte Holzplatte fallen lassen. 1.000 ~ 3000g/0,5ms.

*3 times from 75cm height onto a hard wooden board. 1000 ~ 3000g/0.5ms*

\*Note 2 (Vibration Test Standard):

Frequency : 10 ~ 2000Hz

Amplitude : 0,75mm Spitze/Spitze.

*0.75mm P-P.*

Acceleration : 60 ~ 2000Hz

Period : 2 Stunden in jede Richtung

*2 hours each direction*

1.000 MHz ~ 200.000 MHz

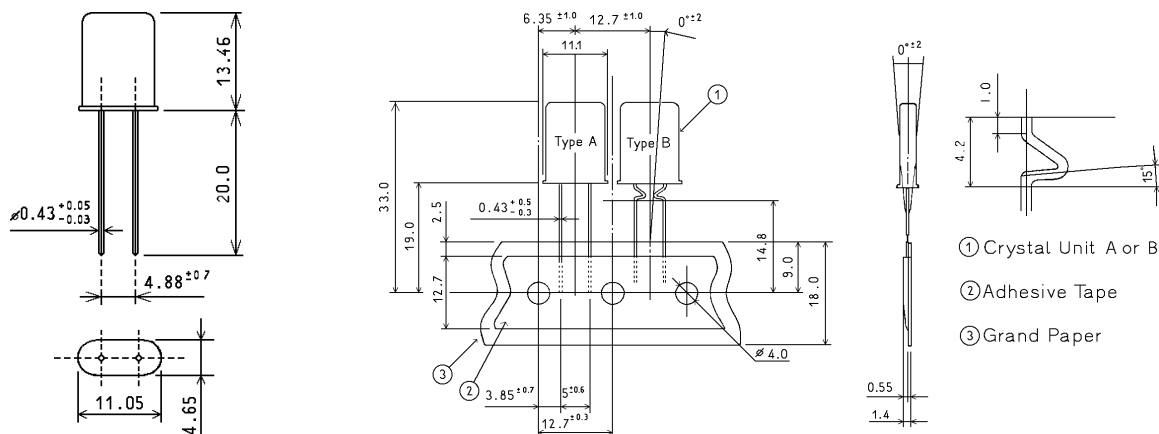
Table 1: Standard Frequencies and typ. R1 for HC-49/U

Frequency (MHz)	R1 (Ω)
1.000000	5000
1.843200	800
2.000000	500
2.097152	500
2.457600	300
3.000000	150
3.276800	120
3.579545	100
3.686400	100
3.932160	100
4.000000	100
4.096000	100
4.194304	80
4.194812	80
4.433619	70
4.500000	60
4.608000	60
4.800000	55
4.915200	55
5.000000	50
5.068800	50
5.120000	50
5.185000	50
5.200000	50
5.714300	45
5.760000	45
5.990400	40
6.000000	40
6.144000	40
6.400000	40
6.553000	40

Frequency (MHz)	R1 (Ω)
6.553600	40
7.000000	40
7.159090	40
7.164112	40
7.200000	40
7.372800	40
7.680000	40
8.000000	35
8.192000	35
8.388608	35
8.867238	35
9.216000	30
9.830400	30
10.000000	30
10.240000	30
10.245000	30
10.700000	30
10.738640	30
11.000000	30
11.059200	30
12.000000	30
12.288000	30
12.750000	30
13.516800	25
13.560000	25
13.875000	25
14.000000	25
14.318180	25
14.745600	25
15.000000	25
15.200000	25

Frequency (MHz)	R1 (Ω)
15.360000	25
16.000000	20
16.257000	20
16.384000	20
17.430000	20
17.734475	20
18.000000	20
18.432000	20
19.660800	20
19.968000	20
20.000000	20
20.480000	20
22.000000	20
22.118400	20
22.198400	20
24.000000	20
24.576000	20
25.000000	40
26.800000	40
27.000000	40
28.000000	40
29.491200	40
30.000000	40
32.000000	40
36.000000	40
48.000000	40
100.000000	90
120.000000	80
150.000000	80
200.000000	80

HC-49/U



Bestempfung (Marking)
4 Zeilen
10 Zeichen je Zeile, Frequenz incl. Dezimalpunkt, Logo, Datecode
4 lines
10 digits per line, incl. decimal point, logo, datecode

Gurtung (Taping)
1000 Stück pro Rolle
1000 pieces per reel