

## AT-CUT CRYSTAL UNIT (Metal-can Type)

RoHS compliant

# HC-49/U-S



### ■ FEATURES

- Frequency range : 3.5 ~ 50.0MHz
- External dimensions (mm)  
L : 11.5 x W : 4.66 x H : 3.5
- Applications  
Consumer products

### ■ DIMENSION [mm]



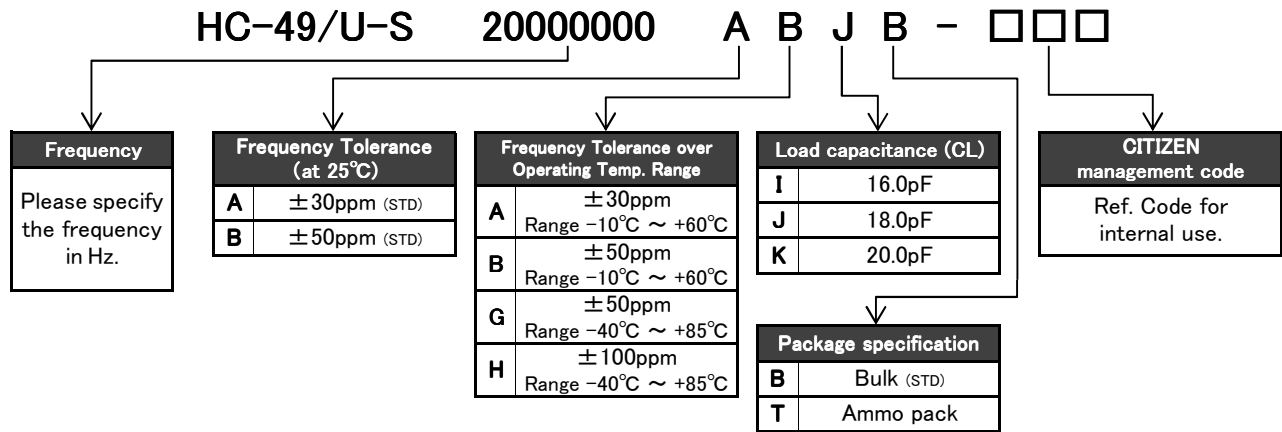
### ■ STANDARD SPECIFICATIONS

Item	Model	HC-49/U-S	Conditions
Nominal Frequency	$f_0$	3.5MHz ~ 30.0MHz (Fundamental) 30.0MHz ~ 50.0MHz (3rd Overtone)	Please contact us for frequencies available
Frequency Tolerance	$\Delta f/f_0$	$\pm 30\text{ppm}$	at 25°C
Frequency Tolerance over Operating Temperature Range	$\Delta f/f_0$	below 6.0MHz: $\pm 50\text{ppm}$ above 6.0MHz: $\pm 30\text{ppm}$	-10°C ~ +60°C
Operating Temperature Range	$T_{OPR}$	-20°C ~ +70°C	
Storage Temperature Range	$T_{STR}$	-40°C ~ +85°C	
Motional (series) resistance	$R_1$	Refer to the following table	at 25°C
Load capacitance	$C_L$	Fundamental: 10.0pF ~ $\infty$ 3rd Overtone: 5.0pF ~ $\infty$	Please specify your requirement
Shunt capacitance	$C_0$	7.0pF Max.	
Level of drive	$D_L$	100 $\mu$ W	
Insulation Resistance	$I_R$	500M $\Omega$ Min.	DC100V $\pm$ 15V
Aging (first year)	$\Delta f/f_0$	$\pm 5\text{ppm}$ Max.	25°C $\pm$ 3°C

### ■ MOTIONAL (SERIES) RESISTANCE (R<sub>1</sub>)

Freq. Range (MHz)	$3.5 \leq f_0 < 4.0$	$4.0 \leq f_0 < 6.0$	$6.0 \leq f_0 < 10.0$	$10.0 \leq f_0 < 14.0$	$14.0 \leq f_0 < 30.0$	$30.0 \leq f_0 < 36.0$	$36.0 \leq f_0 \leq 50.0$
Mode	Fundamental	Fundamental	Fundamental	Fundamental	Fundamental	3rd Overtone	3rd Overtone
$R_1$	200 $\Omega$ Max.	150 $\Omega$ Max.	100 $\Omega$ Max.	80 $\Omega$ Max.	50 $\Omega$ Max.	140 $\Omega$ Max.	100 $\Omega$ Max.

## ■ PART NUMBERING SYSTEM



\*Please contact us for specifications available.

## ■ Part Marking [standard]



f : The first 4 digits of Frequency including the decimal point

C : Manufacture's ID Code

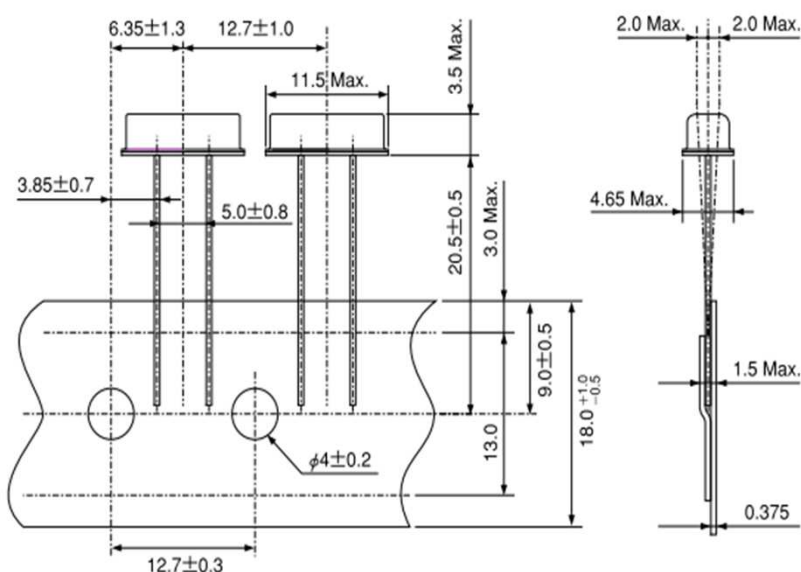
y : The last digit of production year

m : Production month (See Table.1)

Table.1

Month	Jan	Feb	...	Sep	Oct	Nov	Dec
Code	1	2	...	9	X	Y	Z

## ■ Taping dimension : 2,000pcs/Ammo pack [mm]



Product specifications are subject to change without notice.

Rev.2

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[18.432MABJ-UB](#) [HC49US-8.000MABJ-UB](#) [HC49US-3.579545MABJ-UB](#) [HC49US-24.576MABJ-UB](#) [HC49US-](#)  
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[22.1184MABJ-UB](#) [HC49US-6.144MABBP-UB](#) [HC49US-10.000MABKUB](#) [HC49US-24.000MABKUB](#) [HC49US-](#)  
[24.576MABJUB](#) [HC49US-4.000MBBIUB](#) [HC49US-6.000MABO-UB](#) [HC49US-3.6864MABJ-UB](#) [HC49US-13.560MBBI-](#)  
[UT](#) [HC49US-13.560MBBIUB](#) [HC49US-4.000MBBJ-UB](#) [HC-49/U-S16000000ABJB](#) [HC-49/U-S20000000ABJB](#) [HC-](#)  
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[S6144000BBPB](#) [HC-49/U-S6176000ABJB](#) [HC-49/U-S4096000ABJB](#) [HC-49/U-S4194304ABJB](#) [HC-49/U-](#)  
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