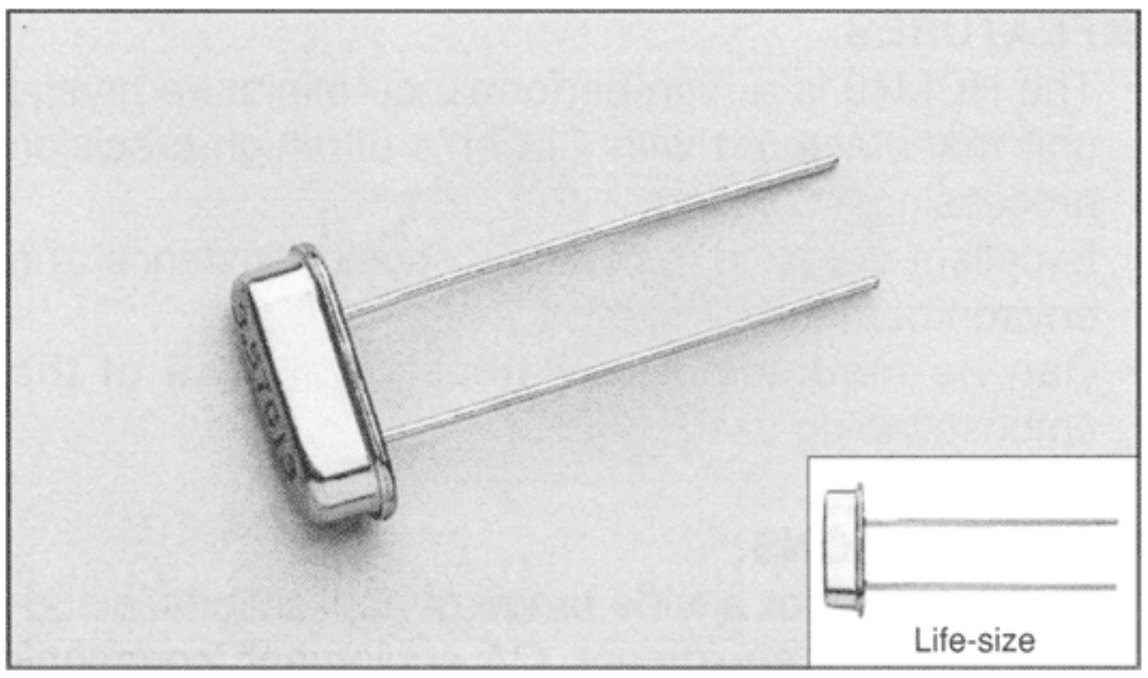
MHz RANGE CRYSTAL UNITS (METAL CAN TYPE)

CITIZEN

HC-49/U-S



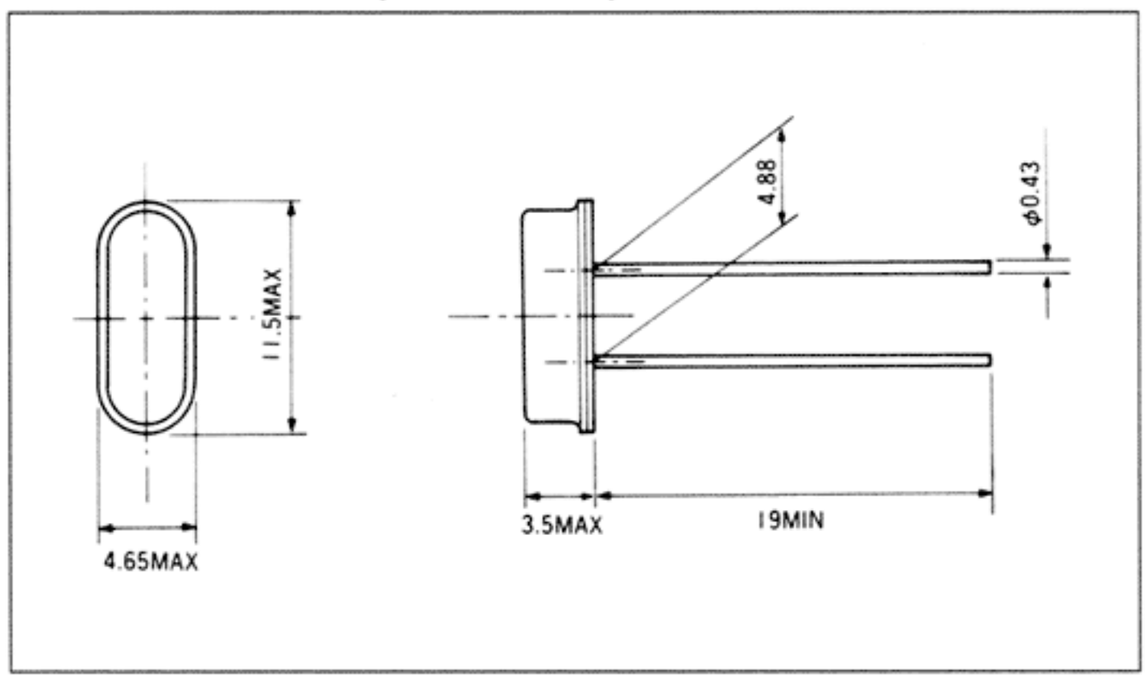
■FEATURES:

- The HC-49/U-S is a high-performance miniature crystal unit manufactured with Citizen's ultrahigh-precision processing technology.
- Excellent vibration resistance, shock resistance and environmental characteristics.
- Can be automatically mounted, as units provided with taping are available by request.

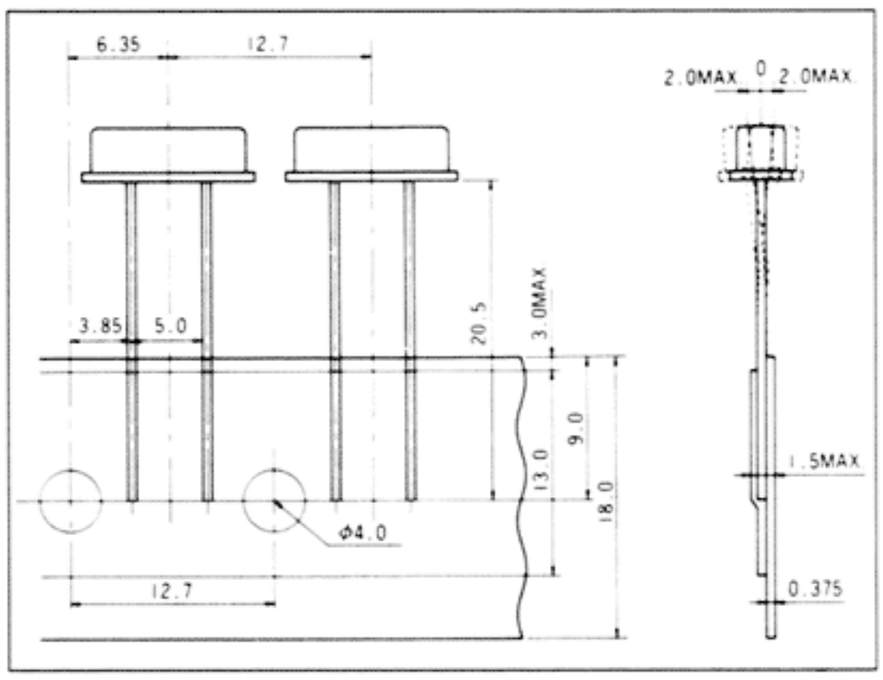
■APPLICATIONS:

- Can be used for a wide range of applications including use in AV equipment, OA equipment, communication equipment and measuring instruments.

■DIMENSIONS: (UNIT=mm)



※**External dimensions for taping (Reference)**
(2.000pcs/Ammo Pack)

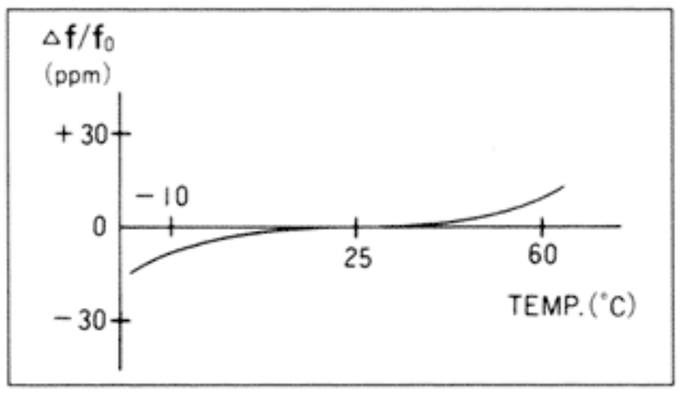


■STANDARD SPECIFICATIONS

Item \ Model		HC-49/U-S	Conditions
Nominal frequency	f_0	3.5MHz~30MHz (Fund) 30~50MHz (3rd OT)	Please contact us for changes in frequency.
Frequency tolerance	$\triangle f/f_0$	±30ppm or ±50ppm	At 25°C
Frequency vs. Temperature characteristics	$\triangle f/f_0$	±50ppm (±30ppm)	–10°C~+60°C
Operating temperature range	T_{ORP}	–20°C~+70°C	
Storage temperature range	T_{STG}	–40°C~+85°C	
Equivalent series resistance	R_1	See drawing	At 25°C
Load capacitance	C_L	16pF TYP.	Please specify
Shunt capacitance	C_0	7.0pF MAX.	
Drive level	DL	100μW	
Insulation resistance	IR	500MΩ MIN.	DC100V±15V
Aging (First year)	$\triangle f/f_0$	±5ppm MAX.	25°C±3°C
Sealing		1×10^{-2} μPa·m³/s MAX.	
Shock resistance	±10ppm MAX. Drop test of 3 times on a hard board from 75cm height or shock test of 3000G x 0.3ms x 1/2 sin wave x 3 directions		Conditions will vary depending on the frequency.

※ Units provided with taping are available by request.

FREQUENCY vs TEMPERATURE CURVE



EQUIVALENT SERIES RESISTANCE (ESR, R_1)

Frequency	Equivalent series resistance	Mode
3.5MHz≦f0<4.0MHz	200	Fundamental
4.0MHz≦f0<6.0MHz	150	
6.0MHz≦f0<10.0MHz	100	
10.0MHz≦f0<14.0MHz	80	
14.0MHz≦f0≦30.0MHz	50	
30.0MHz<f0≦36.0MHz	140	3rd OT
36.0MHz<f0≦50.0MHz	100	

(Ω MAX.)