

## Quartz Crystal Unit Series

### KLS14-HC-49SMD Quartz Crystal Unit Series

#### Features

- Height 4.0mm, or 3.0mm, compact unit for surface mount
- Able to by means of a metal case and completely sealed high solution characteristics
- Copes with high density mounting and is the optimum for mass production

#### ELECTRICAL SPECIFICATIONS

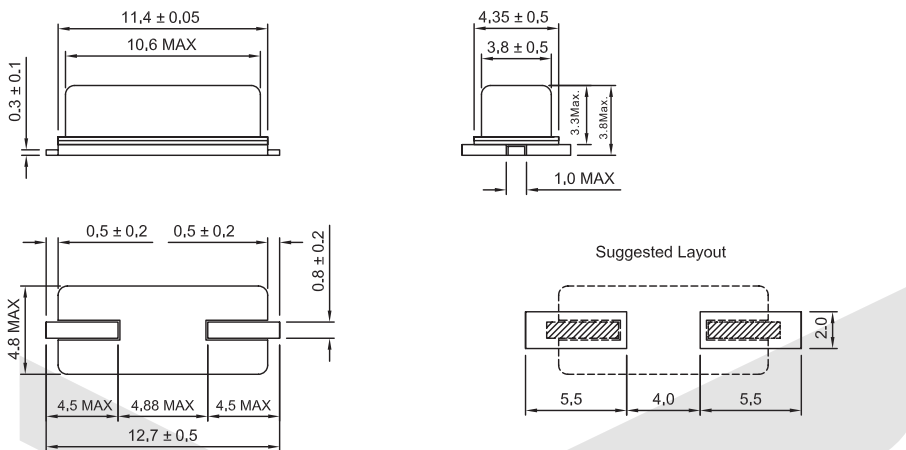
- Nominal frequency: 3.000MHz~100.000MHz
- Operating temperature range: Typical: -20°C~+70°C  
Optional: -10°C~+60°C, -40°C~+85°C, or specify
- Storage temperature range: -40°C~+85°C
- Frequency tolerance: Typical: ±30ppm at 25°C, or specify
- Freq. Temp characteristics: Typical: ±50ppm over -20°C~+70°C, or specify
- Load capacitance: 16pF, 20pF, 30pF, series, or specify
- Parallel capacitance: 7pF Max
- Drive level: 100 μW
- Insulation resistance: More than 500MΩ at DC100V
- Oscillation mode: See below table
- Equivalent series resistance: See below table
- Aging: ±3ppm at 25°C per year



#### EQUIVALENT SERIES RESISTANCE(ESR) AND OSCILLATION MODE

Frequency Range	E.S.R(Ω)	Mode	Frequency Range	E.S.R(Ω)	Mode
3.000MHz~5.999MHz	150	Fundamental/AT	24.000MHz~40.320MHz	30	Fundamental/AT
6.000MHz~7.999MHz	60	Fundamental/AT	24.000MHz~29.999MHz	100	Third Overtone/AT
8.000MHz~15.999MHz	50	Fundamental/AT	30.000MHz~49.999MHz	80	Third Overtone/AT
16.000MHz~30.000MHz	30	Fundamental/AT	50.000MHz~100.000MHz	60	Third Overtone/AT

#### Dimension (unit: mm)



## ORDER INFORMATION

### KLS14-HC-49SMD-XXXX - XX - XX-XX

- Type: HC-49SMD
- Frequency: e.g. 3.000=3.000MHz
- Load Capacitance: e.g. 20=20pF
- Operating temperature range:
  - A: -10°C ~+60°C
  - B: -20°C ~+70°C
  - C: -40°C ~+85°C
- Frequency Tolerance: e.g. 30=30ppm