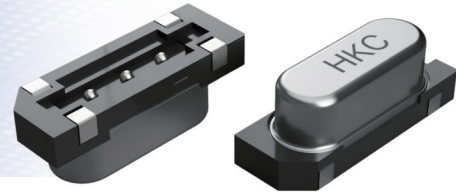




HC49US SMD-4 Epson Type Crystals 49SM Series

Model E2 / E3 / ES HC49US SMD-4



Frequency Range : 3.01MHz to 100.00MHz

Features :

- High reliability & low cost unit
- Tight stability & extended temperature available
- Lead-free type
- Case grounding
- AEC-Q200 Stress Qualified Component

QUARTZ
CRYSTALS

Standard Specifications

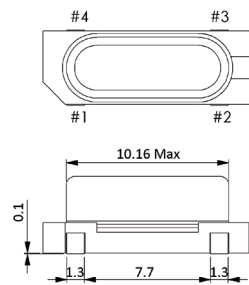
Item	Value	
Frequency Range*	3.01MHz to 100.00MHz	
Frequency Tolerance	±20ppm, ±30ppm (or specify)	
Frequency Tolerance over Temperature range	±50ppm	±100ppm
Operating Temperature Range	-40°C to +85°C	-40°C to +125°C
Operable Temperature Range	-40°C to +130°C	
Drive Level	50uW Typ (300uW Max)	
Load Capacitance	12pF (or specify)	

*: E2 Package starts from 6.00MHz

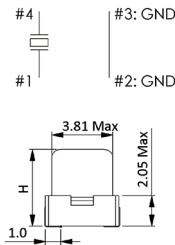
ESR Table

Frequency Range (MHz)	Standard ESR (Ohm)
3.01 ~ 3.49	300
3.50 ~ 3.99	150
4.00 ~ 4.49	130
4.50 ~ 4.99	110
5.00 ~ 5.99	80
6.00 ~ 6.99	60
7.00 ~ 9.99	50
10.00 ~ 12.99	40
13.00 ~ 50.00	30
26.00 ~ 100.00 (30/T)	100

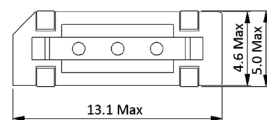
Dimension



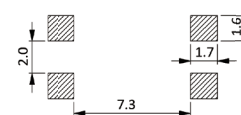
Electrode Arrangement



XTAL TYPE	H
E2	4.2 Max
E3	4.5 Max
ES	5.5 Max



Soldering Pattern



Note :
 1. Manufacturer reserves the right to change the specification and content of this product for improvement without notification.
 2. Custom specification is welcome. Please contact our sales representative for further details.
 3. If the crystal is intended for applications which have direct impact on human life and properties, and require a high degree of reliability and safety concerns, customers must provide full information such as but not limit to the application, electrical and reliability specification at the inquiry beginning stage.
 4. Customers have to agree to the "Guideline for handling crystal units" and "Standard Terms and Condition of Sales" which is printed this catalog before placing orders to our company or our distributors. There are also unpredictable factors such as applied condition, oscillation margin and etc and customers must check them beforehand. In case of queries, please do not fail to send inquiry to our company before ordering.

Ver 1.0

