

Product Specification AEC Electronics Company Limited

Date 25/9/2018

PN: HC49S4H



AEC[®]

AEC Electronics Company Limited

PRODUCT SPECIFICATION

CRYSTAL RESONATOR

AEC PART NUMBER / SPEC. NO: 49S4H4.0000M-AF-30/30-120R-30p

CUSTOMER: Schukat electronic Vertriebs GmbH (Schukat part no QMIM004)



This model is ROHS/PB-free compliance according to the ROHS directive 2002/95/EC

Customer's Name	Schukat electronic Vertriebs GmbH
Production Name	Crystal Resonator
Frequency	4.000 MHz
Model No	49S4H4.0000M-AF-30/30-120R-30p
Issue Date	14 th May, 2026

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Prepared	Inspection	Approved
<i>Nathan</i>	<i>Andy</i>	<i>Henkie</i>

1. GENERAL PROVISION

- 1-1 Production Name: Dip crystal resonator
- 1-2 Holder Type: HC49S4H
- 1-3 This model is ROHS/PB-free compliance according to the ROHS directive 2002/95/EC

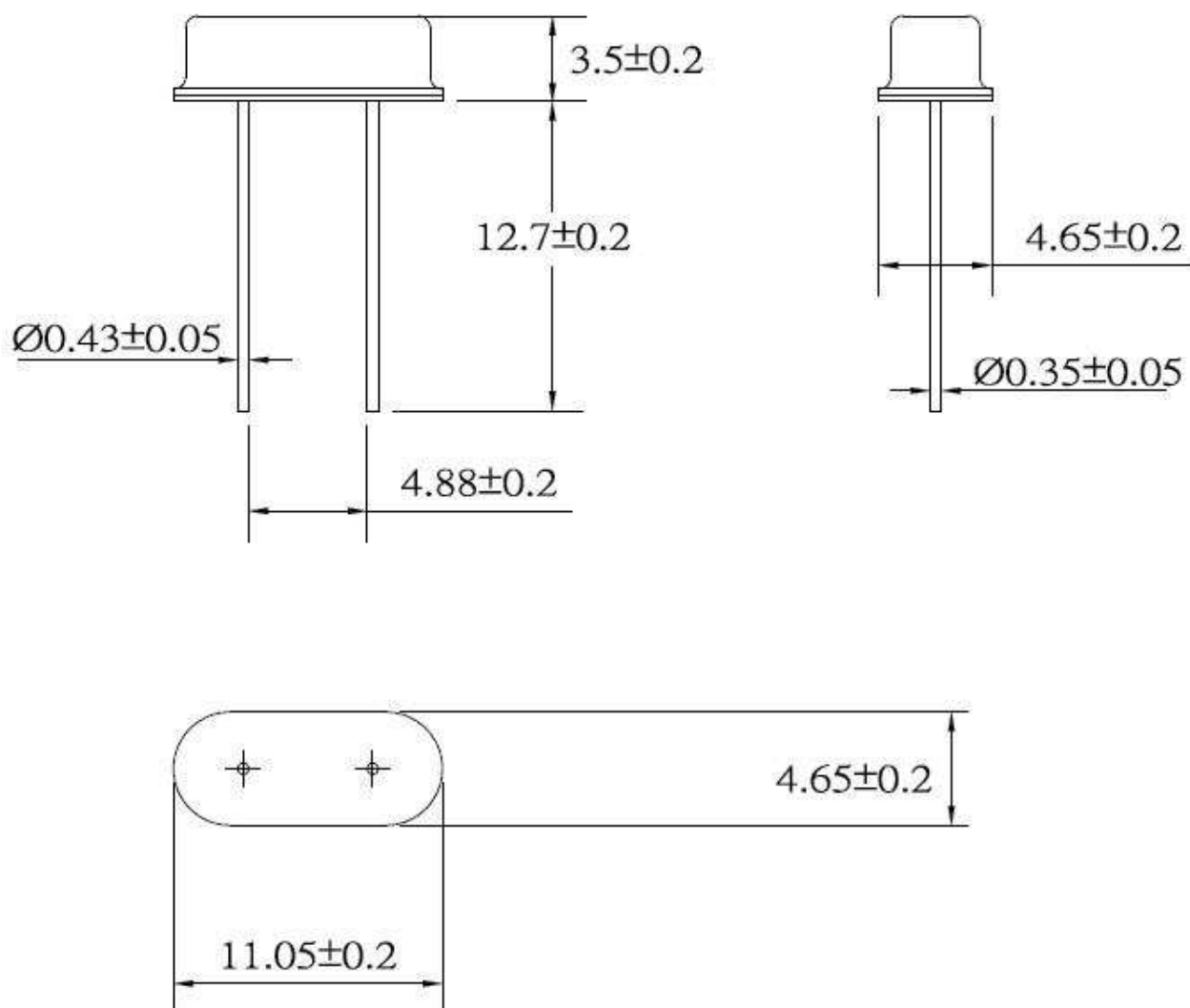
2. ELECTRICAL DATA

- 2-1 Frequency: 4.000 MHz
- 2-2 Mode of Oscillation: AF
- 2-3 Tolerance of Center Frequency: +/- 30 ppm at 25°C
- 2-4 Frequency Stability: +/- 30 ppm in 2-5
- 2-5 Operating Temperature Range: -10 °C to +60 °C
- 2-6 Storage Temperature Range: -40°C to +85°C
- 2-7 Equivalent Series Resistance: 120 Ω max.
- 2-8 Load Capacitance: 30pF
- 2-9 Drive Level: 0.1 mW
- 2-10 Shunt Capacitance: 7 pF max.
- 2-11 Aging: Less than +/- 5 ppm per year
- 2-12 Insulation Resistance: More than 500M ohms at DC 100V
- 2-13 Test: Measured in Saunders CI Meter 150D

2. MECHANICAL DATA

- 3-1 Shock Test
Dropping from 20cm height 3 times on firm wood.
Variation: Frequency less than +/- 5ppm
Resistance less than +/- 15%
- 3-2 Leakage Test
No bubble in water at 90°C +/- 5°C for 3 minutes.
- 3-3 Seal Strength
9kgs force perpendicular to top & bottom.
- 3-4 Lead Pull
1kg force along leads.

3. DIMENSION & LAND PATTERN



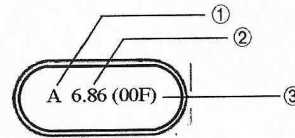
AEC [®] AEC Electronics Company Limited	NO.	DATE	MODIFY CONTENTS		
	1	2018.8.18	NEW EDITION		
DIMENTION	mm				
SCALE	/	PART NAME	Crystal Resonator Dip Type		
TOLERANCE	± 0.2	MODEL	HC49S4H		
DRAWING NO.	DATE	APPV'D BY	CHECK BY	DRAWN BY	
HC49S4H	2018.8.18	Henkie	Andy	Nathan	

4. MARKING

Example

Remarks:

- ① Company Code
- ② Frequency
- ③ YEAR & Month Code



5. PACKAGE

- 5-1 Bulk package: 100pcs per plastic bag, 1000pcs in 1 inner box, 20K per carton.

6. PRECAUTION TO HANDLE CRYSTAL QUARTZ RESONATOR

6-1 When impacted or dropped by mistakes

When crystal quartz resonator is impacted by external heavy shock or dropped to floor by mistakes, be sure to confirm its performance is bad or good before using it.

6-2 Leads wires should be soldered within 3 seconds with the soldering iron heated to a temperature no higher than 350°C / 3"

In soldering –dip processing, the leads should be soldered within 10 seconds with a temperature no higher than 260°C / 5". Mounting in upright is recommendable to prevent the heat conduction directly to the body of the crystal unit.

6-3 When doing solder dip mounting, crystal quartz resonator should be upright on the circuit board, if the crystal quartz resonator is placed sideways the circuit board, take care not to allow heat transmitted across the whole crystal quartz resonator