

SMD form of HC49 Crystals

1.0MHz to 200.0MHz

- Low-cost, industry-standard crystal unit formed for SMD
- Available with close tolerances
- Frequency range 1.0MHz to 200MHz
- Specifications fully customisable

DESCRIPTION

49SMD crystals are long-established, industry-standard HC49 crystals with formed leads and a clip to facilitate surface mounting. The crystals provide a high quality but very low cost source of system clock frequency 49SMD crystals may be produced to very close tolerances.

SPECIFICATION

1.0MHz to 200MHz Frequency Range: Oscillation Mode: See table Calibration Tolerance at 25°C SL-Cut (<1.3MHz): from ±50ppm AT-Cut (>1.3MHz): from ±3ppm Frequency Stability over temperature SL-Cut (<1.3MHz): from ± 100 ppm -10° to $+60^{\circ}$ C from ± 3 ppm 0° to +50°C AT-Cut (>1.3MHz): (see table) Shunt Capacitance (C0): 4pF typical, 7pF maximum Load Capacitance (CL): Series or from 8pF to 32pF (Customer specified CL) ±3ppm maximum, 1st year, Ageing: ±1ppm per year thereafter. Drive Level: 100μW typical., 500μW max. Crystal Holder: Resistance-weld hermetic seal Supply format: Bulk pack or 'Ammo Pak' tape.

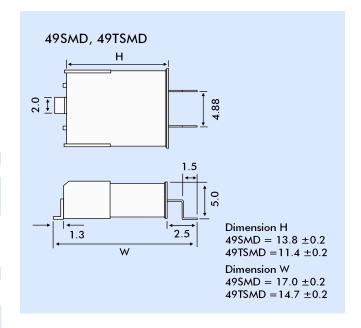
ESR and OSCILLATION MODE

Frequency Range MHz	Crystal Cut Osc. Mode	ESR Ω Max.		
1.0 ~1.3	SL Fund.	5000		
2.01 ~ 3.0	AT Fund.	400		
3.01 ~ 3.2	AT Fund.	200		
3.21 ~ 3.5	AT Fund.	150		
3.51 ~ 3.9	AT Fund.	120		
3.91 ~ 5.0	AT Fund.	100		
5.01 ~ 7.0	AT Fund.	50		
7.01 ~ 10.0	AT Fund.	35		
10.0 ~ 30.0	AT Fund.	25		
30.1 ~ 45.0	AT Fund.	20		
24.0 ~ 100	AT 3rd OT	40		
80.0 ~ 160	At 5th OT	70		
110 ~ 250	AT 7th OT	120		





OUTLINE & DIMENSIONS



STABILITY OVER TEMPERATURE RANGE (AT-CUT CRYSTALS)

Temp.	Stability ppm								
Range °C	±7.5 ±10 ±15 ±20 ±30 ±50 ±100								
0~+50	✓	✓	✓	✓	✓	✓	✓		
-10~+60	✓	✓	✓	✓	✓	✓	✓		
-20~+70	Х	✓	✓	✓	✓	✓	✓		
-30~+80	Х	Х	Х	✓	✓	✓	✓		
-40~+85	Х	Χ	Х	Χ	✓	✓	✓		
-55~+125	Х	Х	Х	Х	Х	✓	✓		

(\checkmark = Available, X = Not available)

PART NUMBER FORMAT

