

**SWISSDIS**



Swissdis AG  
Grasweg 7  
CH-4911 Schwarzhäusern

Tel.: +41 62 919 44 00  
Fax: +41 62 919 44 01  
[info@swissdis.ch](mailto:info@swissdis.ch)  
[www.swissdis.ch](http://www.swissdis.ch)

# SPECIFICATIONS

Crystals HC49 SMD

## AS49SSD-Serie

Version August 2020

# HC-49US, SMD Type

## Resistance Weld Crystal

### Applications:

- Notebook PC
- Portable PC



### FEATURES

- Metal Welded Package
- Excellent Frequency Aging Stability
- High Shock Resistance
- High Heat Resistance
- RoHS/REACH Compliant

### SPECIFICATION

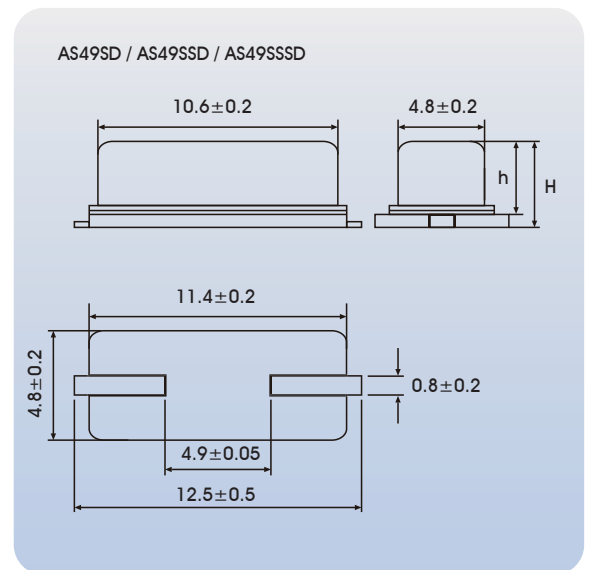
MODEL		AS49SD / AS49SSD / AS49SSSD
Frequency		
Frequency Range (Fundamental)	MHz	3.200 ~ 40.000
Frequency Range (3rd overtone)		24.000 ~ 90.000
Frequency Tolerance (25°C)	ppm	± 10 ~ ± 50
Frequency Stability (Ref to 25°C)	ppm	± 10 ~ ± 50
Environmental Condition		
Operating Temperature Range	°C	- 40 to +85 or Specify
Storage Temperature Range	°C	- 55 to + 125
Aging	ppm/Year	± 3 Max
Electrical Specifications		
Test Circuit		S&A 350A with $\pi$ Fixture
Load Capacitance (CL)	pF	8pF ~ Series (Customer Specified)
Drive Level	uW	10, 50, 100, 500
Equivalent Series Resistance	$\Omega$	see table
Insulation Resistance		More than 500M $\Omega$ at DC 100V
Shunt Capacitance (Co)	pF	5.0 (Max)

### MODE / CUT AND EQUIVALENT SERIES RESISTANCE ( $\Omega$ )

Frequency (MHz)	Mode	Max ESR ( $\Omega$ )
3.200 ~ 3.685	Fundamental/AT	200
3.686 ~ 4.999	Fundamental/AT	150
5.000 ~ 9.999	Fundamental/AT	80
10.000 ~ 13.999	Fundamental/AT	40
14.000 ~ 40.000	Fundamental/AT	30
24.000 ~ 29.999	3rd overtone/AT	100
30.000 ~ 49.999	3rd overtone/AT	80
50.000 ~ 90.000	3rd overtone/AT	60

MODEL	H (mm) SMD High	h (mm) Body High
AS49SD	3.8 ± 0.2	3.3 ± 0.2
AS49SSD	3.0 ± 0.2	2.3 ± 0.2

### DIMENSION (mm)



### MARKING RULE

