



HC-49US, SMD Type (3.8mm height)

Resistance Weld Crystal

Applications:

- Notebook PC
- Portable PC

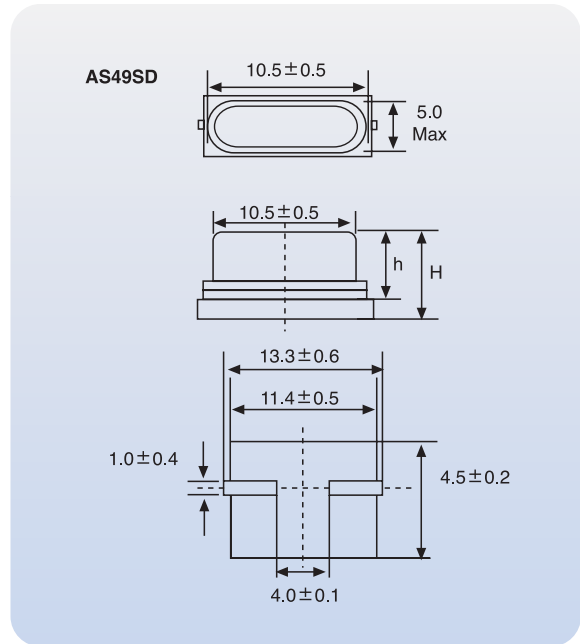
FEATURES

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

SPECIFICATION

MODEL		AS49SD
Frequency		
Frequency Range (Fundamental)	MHz	3.200 ~ 40.000
Frequency Range (3rd overtone)		24.000 ~ 80.000
Frequency Tolerance (25°C)	ppm	±10 ~ ±50
Frequency Stability (Ref to 25°C)	ppm	±10 ~ ±50
Environmental Condition		
Operating Temperature Range	°C	-10 to +70
Storage Temperature Range	°C	-40 to +85
Aging	ppm/Year	±5 Max.
Electrical Specifications		
Test Circuit		S&A 350A with π Fixture
Load Capacitance (CL)	pF	10pF ~ Series (Customer Specified)
Drive Level	uW	0.01uW Min.
Equivalent Series Resistance	Ω	see table
Insulation Resistance		More than 500M Ω at DC 100V
Shunt Capacitance (Co)	pF	5.0 (Max.)

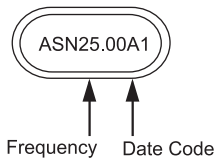
DIMENSION (mm)



Mode/Cut and Equivalent Series Resistance (Ω)

Frequency (MHz)	Mode	Max ESR Ω	MODEL	H(mm) SMD High	h(mm) Body High
3.200~3.999	Fundamental/AT	200	AS49S	-	3.6 Max.
4.000~5.999	Fundamental/AT	100	AS49SS	-	2.7 Max.
6.000~7.999	Fundamental/AT	60	AS49SD	3.8±0.3	3.3±0.3
8.000~11.999	Fundamental/AT	50	AS49SSD	3.0±0.3	2.3±0.3
12.000~14.999	Fundamental/AT	40			
15.000~37.000	Fundamental/AT	30			
20.000~45.000	Fundamental/BT	30			
24.000~44.999	3rd overtone/AT	80			
45.000~80.000	3rd overtone/AT	60			

MARKING RULE



PART NUMBERING GUIDE

Example: AS49SD-25M-FE160E2

MODEL	Frequency	Mode	Tolerance	CL	Stability	OP Temp Range
AS49SD	In MHZ	F: Fundamental 3: 3rd Overtone	A: ±10ppm B: ±15ppm C: ±20ppm D: ±25ppm E: ±30ppm F: ±50ppm G: ±100ppm O: Others	080: 8pF 125: 12.5pF 160: 16pF 180: 18pF 200: 20pF 300: 30pF 320: 32pF S: Series	A: ±10ppm B: ±15ppm C: ±20ppm D: ±25ppm E: ±30ppm F: ±50ppm G: ±100ppm O: Others	1: 0 to +70°C 2: -10 to +70°C 3: -20 to +70°C 4: -20 to +80°C 5: -40 to +85°C 6: -40 to +105°C 0: Others