



HC-49US, SMD Type (3mm height)

Resistance Weld Crystal

Applications:

- Notebook PC
- Portable PC

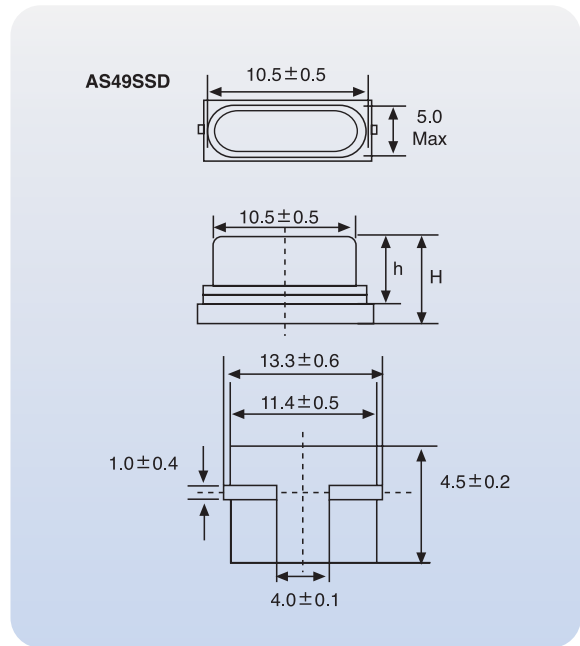
FEATURES

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

SPECIFICATION

| MODEL | | AS49SSD |
|-----------------------------------|----------|------------------------------------|
| 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.) |

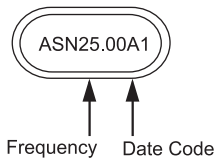
DIMENSION (mm)



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 |
|---------|-----------|-----------------------------------|---|---|---|--|
| AS49SSD | 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 |

*AS49SSD -- SMALL SIZE HC49SD (3.3mm height max.)