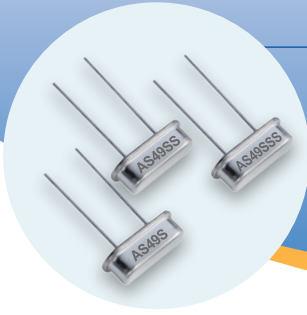


HC-49US, Thru-Hole Type

Resistance Weld Crystal

Applications:

- Notebook PC
- Portable PC



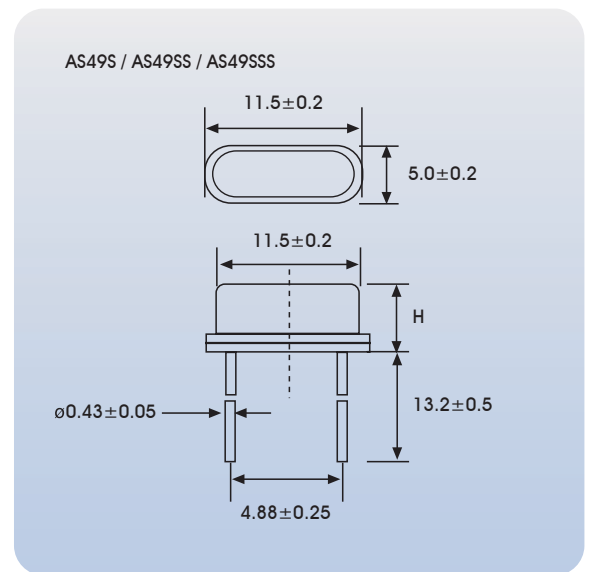
FEATURES

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

SPECIFICATION

MODEL	AS49S/AS49SS/AS49SSS	
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 π Fixture
Load Capacitance (CL)	pF	8pF ~ Series (Customer Specified)
Drive Level	uW	10, 50, 100, 500
Equivalent Series Resistance	Ω	see table
Insulation Resistance		More than 500M Ω at DC 100V
Shunt Capacitance (Co)	pF	5.0 (Max)

DIMENSION (mm)

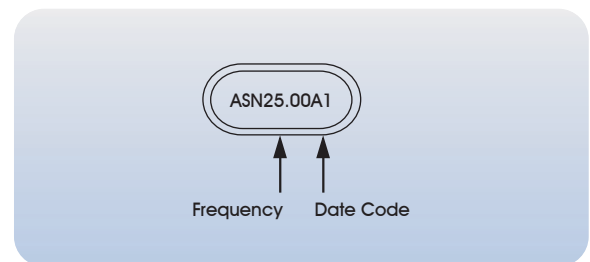


MODE / CUT AND EQUIVALENT SERIES RESISTANCE (Ω)

Frequency (MHz)	Mode	Max ESR (Ω)
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)
AS49S	3.6 ± 0.2
AS49SS	2.7 ± 0.2

MARKING RULE



PART NUMBERING GUIDE

Example: AS49S-25M-FE160E2

MODEL	Frequency	Mode	Tolerance	CL	Stability	OP Temp Range
AS49S	In MHz	F: Fundamental	A: ±10ppm	080: 8pF	A: ±10ppm	1: 0 to +70°C
AS49SS		3: 3rd Overtone	B: ±15ppm	125: 12.5pF	B: ±15ppm	2: -10 to +70°C
AS49SSS				C: ±20ppm	160: 16pF	C: ±20ppm
			D: ±25ppm	180: 18pF	D: ±25ppm	4: -20 to +80°C
			E: ±30ppm	200: 20pF	E: ±30ppm	5: -40 to +85°C
			F: ±50ppm	300: 30pF	F: ±50ppm	6: -40 to +105°C
			G: ±100ppm	320: 32pF	G: ±100ppm	0: Others
			O: Others	S: Series	O: Others	