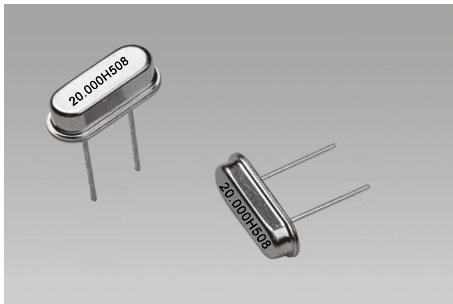


## • E49A Series DIP 49US Crystal



This part is a miniature AT cut strip crystal units with a low profile package. It is with resistance weld.

### FEATURES

- Low Cost
- Industry Standard
- Wide Frequency Range
- Excellent Aging

## Electrical Specifications

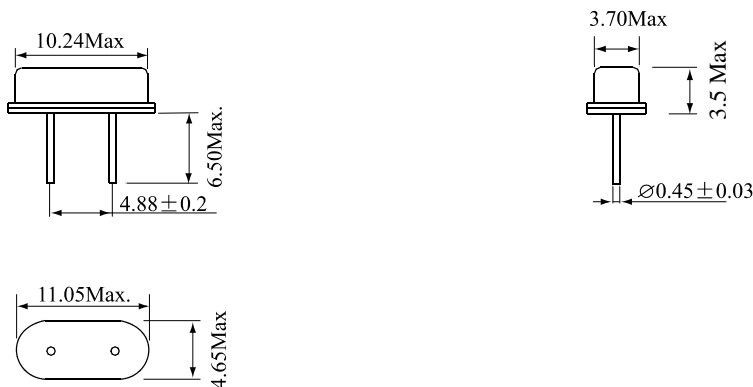
Type	E49A	
Frequency Range	F0	3.2~66.000MHz
Load Capacitance	CL	10pF to Series
Frequency Tolerance	$\Delta F / F_0$	$\pm 10\text{ppm}, \pm 30\text{ppm}, \pm 50\text{ppm}(\text{At } 25^\circ\text{C})$
Equivalent Series Resistance	ESR	See Table 1
Temperature Stability	TC	$\pm 10\text{ppm}, \pm 30\text{ppm}, \pm 50\text{ppm}(\text{Refer to } 25^\circ\text{C})$
Operating Temperature Range	TOPR	-20~+70°C, -30~+85°C Option
Storage Temperature Range	TSTG	-55~+125°C
Shunt Capacitance	C0	7pF max.
Insulator Resistance	IR	500M $\Omega$ min. (At 100VDC)
Drive Level	DL	100 $\mu$ W(500 $\mu$ W max.)
Aging	Fa	$\pm 5\text{ppm max. (At } 25^\circ\text{C, First year)}$
Packing Unit		200pcs/bag

**Table 1: Equivalent Series Resistance(ESR) and Mode of Vibration(Mode)**

Frequency Range(MHz)	Max ESR( $\Omega$ )	Mode	Frequency Range(MHz)	Max ESR( $\Omega$ )	Mode
3.200 to 4.499	150	Fundamental/AT	9.000 to 9.999	60	Fundamental/AT
4.500 to 5.999	120	Fundamental/AT	10.000 to 12.999	50	Fundamental/AT
6.000 to 6.999	100	Fundamental/AT	13.000 to 40.000	40	Fundamental/AT
7.000 to 7.999	90	Fundamental/AT	40.000 to 66.000	80	3 <sup>rd</sup> Overtone
8.000 to 8.999	80	Fundamental/AT			

\*\*Please contact us for inquiries regarding other Specifications

## Mechanical Dimensions(mm)



### TAIWAN:

HOSONIC ELECTRONIC CO., LTD.  
23-1 LANE 84, CHUN YING ST. SHULIN CHEN.  
TAIPEI 23804, TAIWAN  
WEB SITE: <http://www.hosonic.com>

☎: 886-2-86875200  
☎: 886-2-26816456  
✉: [hosonic.sales@hosonic.com](mailto:hosonic.sales@hosonic.com)

### CHINA:

HANGZHOU HOSONIC ELECTRONIC CO., LTD.  
NO.242 LIANGBO ROAD, LIANGZHU TOWN.  
YUHANG DISTRICT, HANGZHOU, ZHEJIANG, CHINA  
WEB SITE: <http://www.hosonic.com>

☎: 86-571-88778189  
☎: 86-571-88778857  
✉: [hosonic.sales@hosonic.com](mailto:hosonic.sales@hosonic.com)

Specifications are subject to change without notice