

Miniature Type Crystal Resonators

AT-49, AT-38



AT-49



AT-38

■ Features

- Crystal resonators with superior frequency stability for standard clock oscillation for microprocessors.
- AT-49 type also works well for visual applications.

■ Series Resistance

Frequency	Type	Vibration Mode	AT-49
3.072~3.5MHz		Fund.	300Ωmax.
3.5~3.8MHz		Fund.	150Ωmax.
3.8~4.1MHz		Fund.	120Ωmax.
4.1~5.0MHz		Fund.	100Ωmax.
5.0~6.0MHz		Fund.	80Ωmax.
6.0~8.0MHz		Fund.	70Ωmax.
8.0~10.0MHz		Fund.	60Ωmax.
10.0~12.0MHz		Fund.	50Ωmax.
12.0~28.0MHz		Fund.	40Ωmax.
28.0~33.9MHz		Fund.	50Ωmax.
26.0~40.0MHz		3rd	100Ωmax.
40.0~70.0MHz		3rd	80Ωmax.

■ Series Resistance

Frequency	Type	Vibration Mode	AT-38
3.57~3.7MHz		Fund.	200Ωmax.
3.7~4.0MHz		Fund.	180Ωmax.
4.0~4.1MHz		Fund.	150Ωmax.
4.1~5.0MHz		Fund.	120Ωmax.
5.0~7.0MHz		Fund.	100Ωmax.
7.0~10.0MHz		Fund.	80Ωmax.
10.0~12.0MHz		Fund.	70Ωmax.
12.0~14.0MHz		Fund.	60Ωmax.
14.0~16.0MHz		Fund.	50Ωmax.
16.0~30.0MHz		Fund.	40Ωmax.
26.0~40.0MHz		3rd	100Ωmax.

Consult our sales representative for other specifications or special specifications.

■ Frequency Range

AT-49 3.072~70.000MHz
AT-38 3.579~28.000MHz

■ Vibration Mode

Thickness-shear mode (AT cut)
Fundamental, 3rd overtone

■ Drive Level

10μW (Fund.)
50μW (3rd)

■ Load Capacitance

Series, 12pF, 16pF, 20pF, 32pF (Fund.)
8pF, 10pF, 12pF, 16pF (3rd)

■ Frequency Tolerance (at 25°C)

$\pm 30 \times 10^{-6}$, $\pm 50 \times 10^{-6}$, $\pm 100 \times 10^{-6}$

■ Frequency Tolerance over Temperature (Ref. to 25°C)

$\pm 30 \times 10^{-6}$, $\pm 50 \times 10^{-6}$, $\pm 100 \times 10^{-6}$

■ Operating Temperature Range

-10~+60°C

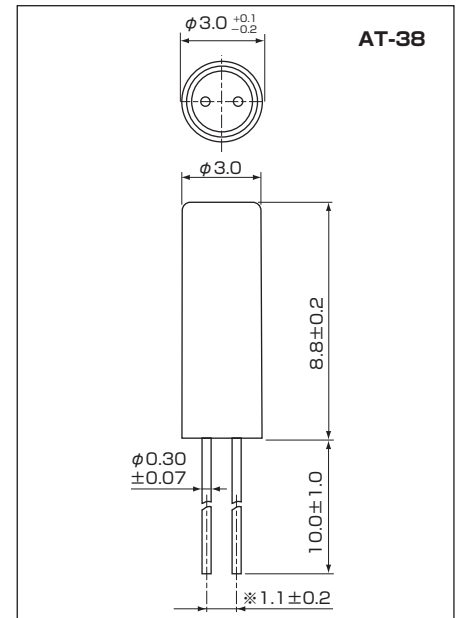
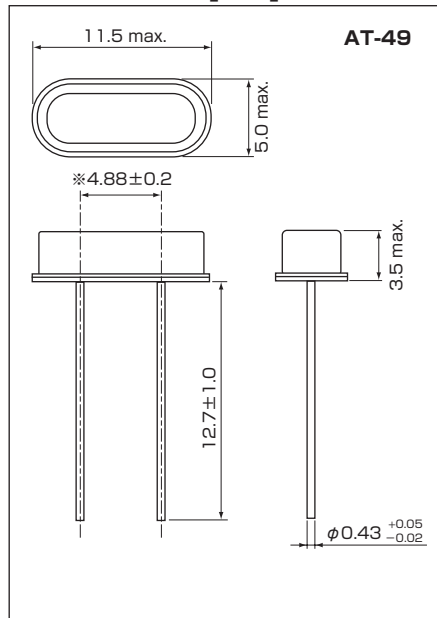
■ Storage Temperature Range

-30~+80°C

■ Max. Drive Level

300μW max. (Fund.)
1mW max. (3rd)

■ Dimensions [mm]



※ Per dimension closest to the body of the unit.