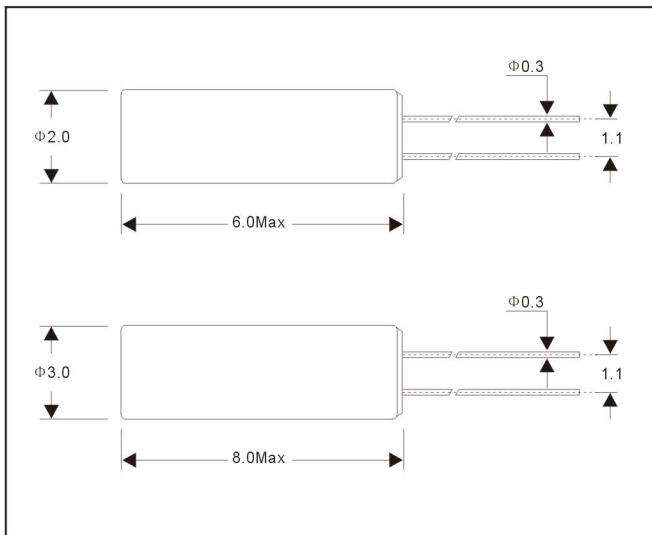


Series JU-2*6 JU-3*8



External dimensions

Unit: mm

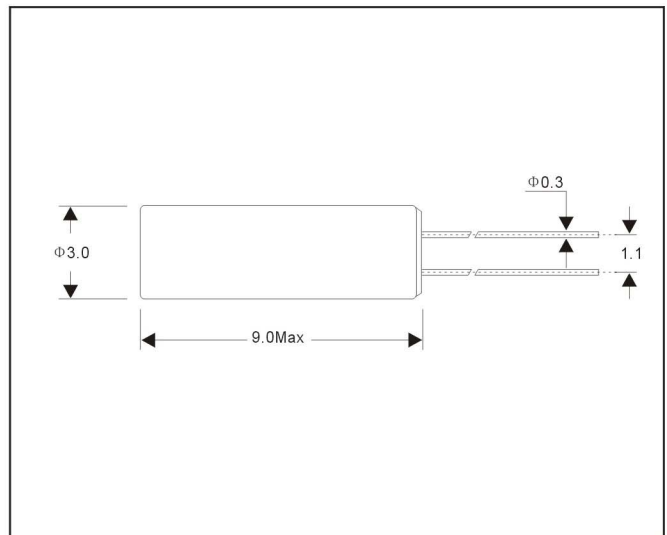


Series AT-3*9



External dimensions

Unit: mm



| Item | Specification | | Remarks |
|------------------------------------|--|----------|-----------------------|
| Series | JU-2*6 | JU-3*8 | |
| Nominal Frequency | 32.768KHz | | Standard |
| Frequency Range | 30KHz to 170KHz | | Available |
| Frequency Tolerance | ±20PPM(Standard) | | Others are offered |
| Turn Over Temperature(Frequency) | 25°C ±5°C | | |
| Temperature coefficient(Frequency) | -0.04PPM×10 ⁻⁶ /°C ² | | Maximum |
| Load Capacitance | 12.5pF to ∞(Standard) | | Please specify |
| Series Resistance | 35KΩ Max | 50KΩ Max | 32.768KHz |
| | As ESR Table | | 30KHz to 170KHz |
| Shunt Capacitance | 0.9pF | 0.8pF | Standard |
| Drive Level | 1.0μW | | Maximum |
| Operating Temperature Range | -10°C to +60°C(Standard) | | Others are offered |
| Storage Temperature Range | -40°C to +85°C | | |
| Insulated Resistance | 100MΩ | | Minimum |
| Aging | ±3PPM/Year | | Maximum, at 25°C ±5°C |

Resistance of Series Resonance (ESR)

| Frequency(KHz) | KΩ Max | Frequency(KHz) | KΩ Max |
|----------------|--------|-----------------|--------|
| 30.000~40.000 | 45 | 70.000~120.000 | 12 |
| 30.000~60.000 | 20 | 120.000~170.000 | 10 |
| 60.000~70.000 | 15 | | |

Remark:

All specifications subject to change without notice.

| Item | Specification | Remarks |
|----------------------------------|-----------------------------------|--------------------------|
| Nominal Frequency Range | 10.000MHz to 28.000MHz | Fundamental Mode; AT Cut |
| | 28.000MHz to 60.000MHz | Overtone Mode; AT Cut |
| Frequency Tolerance | ± 10PPM(Standard) at 25 °C ± 3 °C | Others are offered |
| Load Capacitance | 10pF to ∞ | Please specify |
| Series resistance | As ESR Table | |
| Shunt Capacitance | 5pF Max | |
| Drive Level | 10 μ W to 100 μ W | 1000 μ W Max |
| Operating Temperature Range | -20 °C to +70 °C (Standard) | Others are offered |
| Storage Temperature Range | -30 °C to +85 °C | |
| Stability Over Temperature Range | ± 30PPM(Standard) | Others are offered |
| Insulated Resistance | | Minimum at 100Vdc |
| Aging | ± 3PPM/Year | Maximum |

Resistance of Series Resonance (ESR)

| Frequency (MHz) | Mode | Ohm Max | Frequency (MHz) | Mode | Ohm Max |
|-----------------|-------|---------|-----------------|-------|---------|
| 10~12 | Fund. | 60 | 28~36 | Fund. | 100 |
| 12~16 | Fund. | 50 | 36~60 | Fund. | 80 |
| 16~28 | Fund. | 40 | | Fund. | |

Remark:

All specifications subject to change without notice.