

Applications

- Industrial Control Consumers .

Features

- Dimensions:49SMD:11.5 x 4.80 x3.8 mm.
- Surface mount type crystal units.
- A great number of standard frequency
- Frequency range:3.2768~64MHz

Specifications

| | |
|--|----------------------------------|
| Standard Frequency | 3.2768~64 MHz |
| Vibration Mode | AT Fundamental |
| Load Capacitance | 12pF,20pF,or specify |
| Frequency Tolerance (at 25) | ±10ppm,±20ppm,or specify |
| Frequency Versus Temperature Characteristics | ±20ppm,or specify |
| Operating Temperature | -20~+70℃ , -40~+85℃ , or specify |
| Storage Temperature | -40~+85℃ or specify |
| Shunt Capacitance | 7 pF Max. |
| Level of Drive | 1~500μWMax.(100uW typical) |
| Aging (at 25 °C) | ±3ppm/year Max. |

Equivalent Series Resistance(ESR)

| Fundamental | | | |
|---------------|------------|-------------|-----------|
| 3.2768 ~ 4MHz | 180 Ω Max. | 6 ~ 7 MHz | 80 Ω Max. |
| 4 ~ 5MHz | 120 Ω Max. | 7 ~ 10 MHz | 60 Ω Max. |
| 5 ~ 6 MHz | 100 Ω Max. | 10 ~ 27MHz | 40 Ω Max. |
| 3rd Overtone | | | |
| 20 ~ 25 MHz | 100 Ω Max. | 25 ~ 64 MHz | 80 Ω Max. |

Dimensions and Patterns [unit:mm]

Package Size – Dimensions (Unit: mm)

Side View

| TYPE | H (SMD HIGH) | h (BODY HIGH) |
|--------|--------------|---------------|
| 49SMD | 3.8 ± 0.3 | 3.3 ± 0.3 |
| 49SSMD | 3.0 ± 0.3 | 2.3 ± 0.3 |

Bottom View

Top View Suggested Layout

Units: mm

Reflow Soldering Profile

Pre Heating Temperature

Tp1 ~ Tp2 = + 170 °C

Heating Temperature

TMit = + 220 °C

Peek Temperature

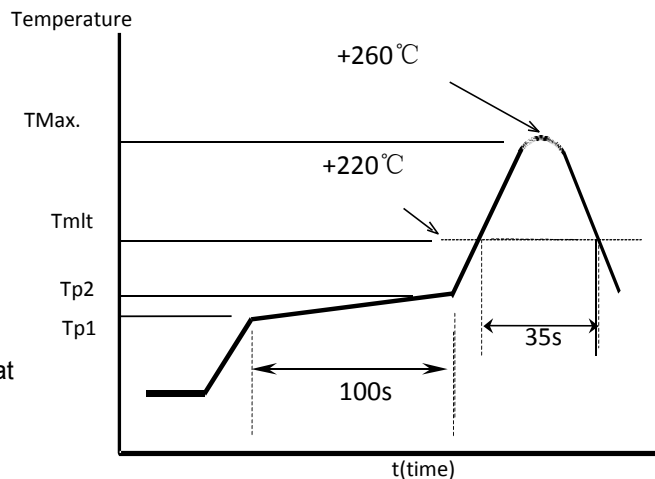
TMax. = + 260 °C

Point of measuring

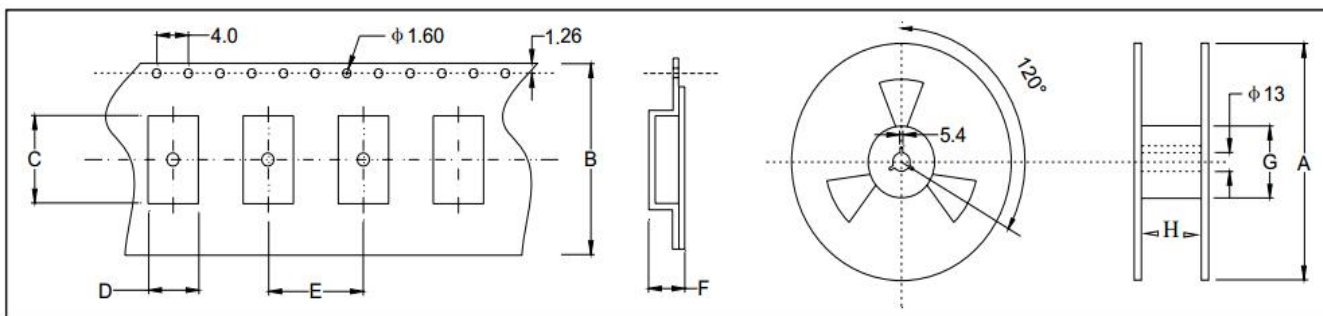
In case of Solder ability

Terminal.

In case of Resistance to soldering heat
Surface.



Taping Specification(Unit: mm)



| Size | A | B | C | D | E | F | G | H |
|--------|---------|----------|-----------|----------|---------|----------|-----------|----------|
| 49SMD | 330±2.0 | 24.0±0.3 | 11.90±0.1 | 5.00±0.1 | 8.0±0.1 | 4.25±0.2 | 100.0±1.0 | 24.5±1.0 |
| 49SSMD | 330±2.0 | 24.0±0.3 | 11.80±0.1 | 5.00±0.1 | 8.0±0.1 | 3.50±0.2 | 100.0±1.0 | 24.5±1.0 |

1000 pcs per reel