



Features

- ESD protection for high-speed data lines etc.
- Contact discharge typical 8kV , max 15KV
- Air discharge typical 15kV, max 25KV
- Extremely small form factor, down to 1.60×0.80×0.50mm³ .
- Continue working voltage: 24V DC max.
- Extremely low capacitance: 0.05pF (typical)
- Very low clamping voltage: 35V (typical)
- Very low leakage current: <100 nA (typical)
- Pb-free (RoHS compliant)

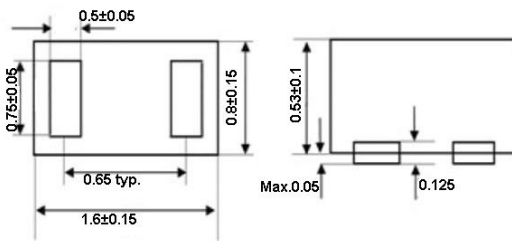
Standard

IEC61000-4-2(ESD)

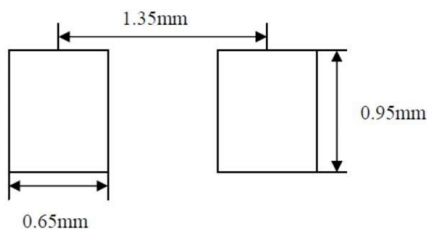
Electrical Specifications

| Specification | Units | Part Number |
|-------------------------------|--------|---|
| | | 0603ESD-P |
| Operating Voltage | V (DC) | <24 |
| Clamping Voltage | V | 35(typical) |
| Trigger Voltage | V | 350(typical) |
| Response time | ns | <1ns |
| ESD Threat Voltage Capability | kV | IEC 61000-4-2, level 4 |
| | | 8kV typical, 15KV max. Direct Discharge |
| | | 15kV typical, 25KV max. Air Discharge |
| Capacitance (@1MHz) | pF | 0.05(typical) |
| Leakage Current (@5V dc) | nA | <100 |
| Operating Temperature | °C | -40 to 90 |

Dimensions (unit: mm)



Recommended pad layout (unit: mm)



Note: Print solder in thickness of 0.15mm to 0.20mm

Storage Conditions

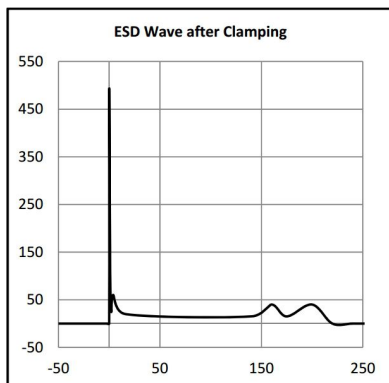
+10°C to +60°C
 Relative humidity: ≤75% yearly average
 Without dew, maximum 30 days at 95%

Soldering Parameters

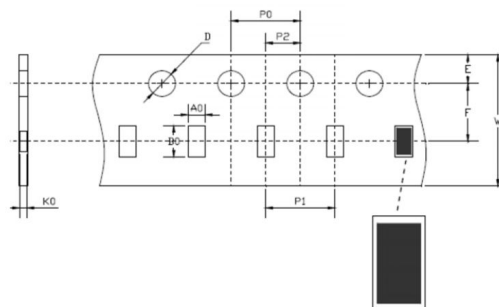
260°C. ≤ 10 sec (Wave Soldering)
 350°C. ≤ 3 sec (Hand Soldering)

ESD Performance

The device reacts within 1ns to clamp ESD Voltage



Standard Packing



| Dimension | Typical (mm) |
|-----------|--------------|
| A0 | 1.10 |
| B0 | 1.90 |
| K0 | 0.60 |
| D | 1.55 |
| P0 | 4.00 |
| P1 | 4.00 |
| P2 | 2.00 |
| E | 1.75 |
| F | 3.50 |
| W | 8.00 |

Ordering Information

| Series | Capacitance | Packaging Code | Qty |
|-----------|-------------|----------------|-----|
| 0603ESD-P | | | |