

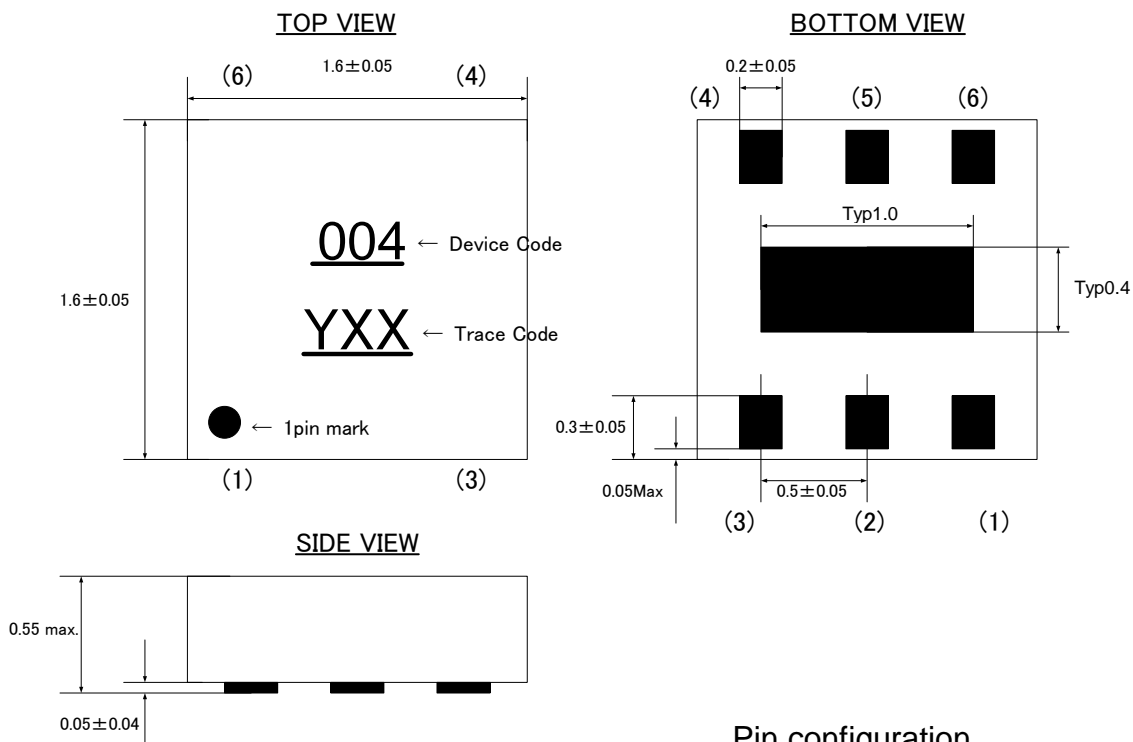
### 1. Application

- ESD Protection

### 2. Features

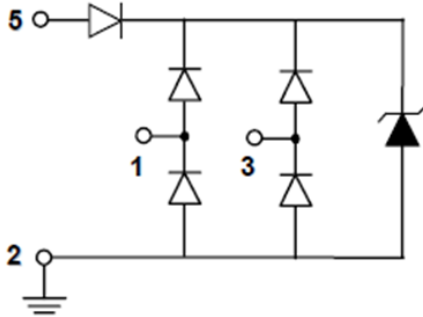
- IEC61000-4-2(ESD)  $\pm 15\text{kV}$ (air),  $\pm 12\text{kV}$ (contact)
- Low capacitance :  $0.55\text{pF}$  typical
- Fast turn on and low clamping voltage
- For 2lines
- RoHS regulation conformity parts

### 3. Mechanical details (dimensions : mm)



Pin configuration

| No. | Terminal name |
|-----|---------------|
| (1) | I/O 1         |
| (2) | GND           |
| (3) | I/O 2         |
| (4) | NC            |
| (5) | VDD           |
| (6) | NC            |

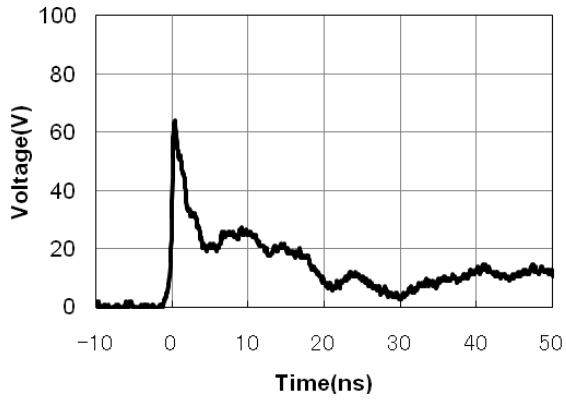
**4. Schematic**

**5. Maximum Ratings**

| Rating                          | Symbol    | Value       | Units       |
|---------------------------------|-----------|-------------|-------------|
| Operating voltage(VDD-GND)      | $V_{DC}$  | 5.5         | V           |
| ESD per IEC 61000-4-2 (air)     | $V_{ESD}$ | $\pm 15$    | kV          |
| ESD per IEC 61000-4-2 (contact) |           | $\pm 12$    |             |
| Lead Soldering Temperature      | $T_{SOL}$ | 260(10sec.) | $^{\circ}C$ |
| Operating Temperature           | $T_{OP}$  | -40 to +85  | $^{\circ}C$ |
| Storage Temperature             | $T_{STO}$ | -40 to +125 | $^{\circ}C$ |

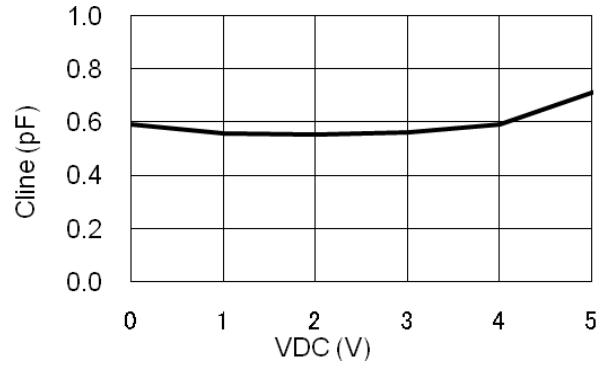
**6. Electrical characteristics (T=25 $^{\circ}C$ )**

| Parameter                 | Symbol     | Condition   | Min | Typ  | Max | Units   |
|---------------------------|------------|---|-----|------|-----|---------|
| Leakage current (I/O-GND) | $I_{Leak}$ | $V_{pin5}=5V, V_{pin2}=0V, V_{CH}=0-5V$                 |     |      | 1   | $\mu A$ |
| Breakdown voltage         | $V_{BV}$   | $I_{BV} = 1mA$  | 6   |      | 9   | V       |
| Capacitance (I/O-GND)     | $C_{IN}$   | $V_{pin5} = 5V, V_{pin2} = 0V, V_{IN} = 2.5V, f = 1MHz$ |     | 0.55 |     | pF      |

### 7. Typical Characteristics

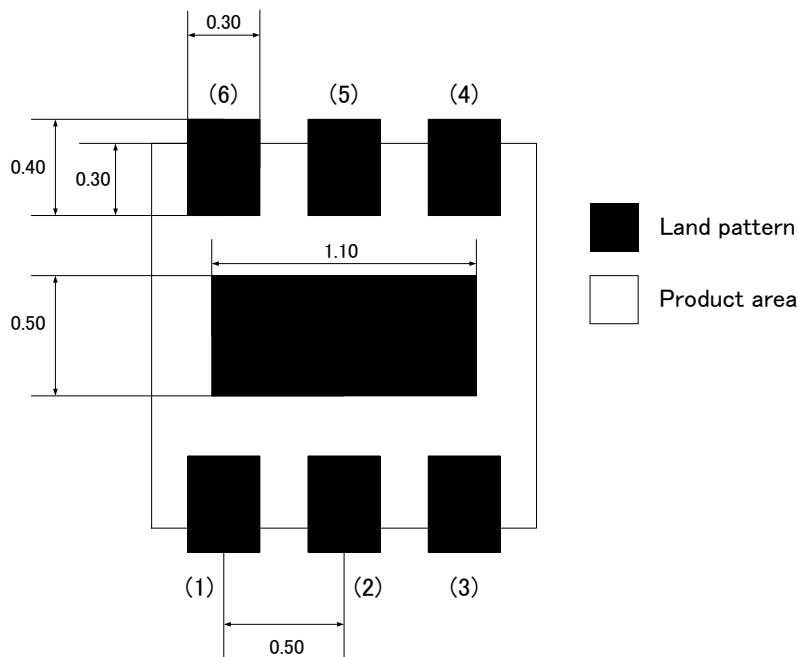


ESD Waveform (IEC61000-4-2:8kV Contact)



Voltage – Capacitance Characteristic

### 8. Land layout (Dimension :mm)



Notes: this land layout is for reference purpose only.

