

### CE10L03P3S1

### 1-channel ultra low capacitance ESD diode

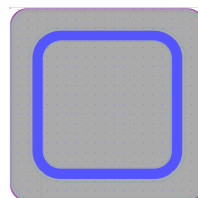
## Preliminary

#### Wafer Information

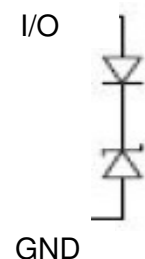
| Item                          | Description         |
|-------------------------------|---------------------|
| Wafer Size                    | 6 inch (150mm)      |
| Wafer Thickness               | 150um ± 10um        |
| Die Size (with scribe lane)   | 246um x 246um       |
| Bond Pad Opening              | 121um x 121um       |
| Scribe Lane Width             | 40um                |
| Gross Die Per Wafer           | 258,400             |
| Top Metal (for wire bond)     | AlSiCu 4μm          |
| Backside Metal (for die bond) | TiNiAgSn 1/3/5/14KÅ |

- Complies with IEC 61000-4-2 standards:  
Contact discharge: ±30kV

#### Die Appearance



#### Circuit Diagram



### Absolute Maximum Ratings ( $T_A=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter                   | Symbol    | Value       | Unit |
|-----------------------------|-----------|-------------|------|
| Peak Pulse Power (8/20μs)   | Ppk       | 230         | W    |
| Peak Pulse Current (8/20μs) | IPP       | 14          | A    |
| Operating Temperature Range | $T_J$     | -55 to +125 | °C   |
| Storage Temperature Range   | $T_{stg}$ | -55 to +150 | °C   |

### Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter   | Symbol | Min | Typ | Max  | Unit | Test Condition             |
|---|--------|-----|-----|------|------|----------------------------|
| Reverse Working Voltage                           | VRWM   |     |     | 3.3  | V    |                            |
| Breakdown Voltage                                 | VBR    | 4.2 |     |      | V    | $I_T = 1\text{mA}$         |
| Reverse Leakage Current                           | IR     |     |     | 100  | nA   | VRWM = 3.3V                |
| Clamping Voltage                                  | VC     |     | 8.0 |      | V    | IPP = 1A (8 x 20μs pulse)  |
| Clamping Voltage                                  | VC     |     |     | 13   | V    | IPP = 7A (8 x 20μs pulse)  |
| Clamping Voltage                                  | VC     |     |     | 17   | V    | IPP = 14A (8 x 20μs pulse) |
| Junction Capacitance<br>( Single Die I/O to GND ) | $C_J$  |     | 0.7 | 0.85 | pF   | VR = 0V, f = 1MHz          |

**Note:** Electrical parameters are only for die, performance may alter after assembly.