

1. Scope :

This specification applies to P/N silicon TVS diode chips,
Device NO. SD-12908

2. Structure :

- 2-1. Planar type : P/N Diode.
- 2-2. Electrodes :
Top side : Aluminum alloy.
Back side : Gold layer.

3. Size :

- 3-1. Chip size : 31.5 mils x 27.6 mils (0.800 mm x 0.700 mm).
- 3-2. Chip thickness : 5.9 ± 1.0 mils (0.150 ± 0.0254 mm)
- 3-3. Bonding pad : 26.8 mils x 22.8 mils (0.680 mm x 0.580 mm).
- 3-4. Pattern drawing : Refer to the attached drawing.

4. Electrical characteristics (Ta = 25 °C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|---|-------------------|------|------|------|------|---|
| Reverse Working Voltage | V _{RWM} | | | 5 | V | - |
| Reverse Current | I _R | | | 2000 | nA | V _R =5V E _e =0mW/cm ² |
| Reverse Breakdown Voltage | V _(BR) | 7 | | 9 | V | I _R =5mA E _e =0mW/cm ² |
| Capacitance | C _T | | 874 | | pF | F=1MHZ, V _R =0V |
| Reverse Clamping Voltage <i>*IEC6100-4-5 Standard.</i> | V _C | | 7.49 | | V | I _{PP} =1A T _p =8/20us |
| | | | 7.93 | | V | I _{PP} =4A T _p =8/20us |
| Forward Voltage | V _f | | | 1.2 | V | I _F =10mA E _e =0mW/cm ² |

| Parameter | Symbol | Rating | Unit |
|--|------------------|--------|------|
| ESD Voltage Air <i>*IEC6100-4-2 Standard.</i> | V _{ESD} | 30 | KV |
| ESD Voltage Contact <i>*IEC6100-4-2 Standard.</i> | | 30 | |

*AEC-Q101 qualified.

