

# Data sheet

## 2CL82 Diode

High voltage rectifier diodes 2CL82 Series adopts high reliable mesa structure and diffusion craft work, epoxy resin molded in a compact structure.

### ■ Features

- Avalanche characteristic
- More sizes to choose
- epoxy resin molded in vacuum, have anti-corrosion in the surface
- $T_j$ : -40°C—+150°C

### ■ Applications

- High voltage rectifier used in electrostatic cleaning
- High voltage generator
- High voltage testing equipment
- General purpose high voltage rectifier, voltage multiplier assembly

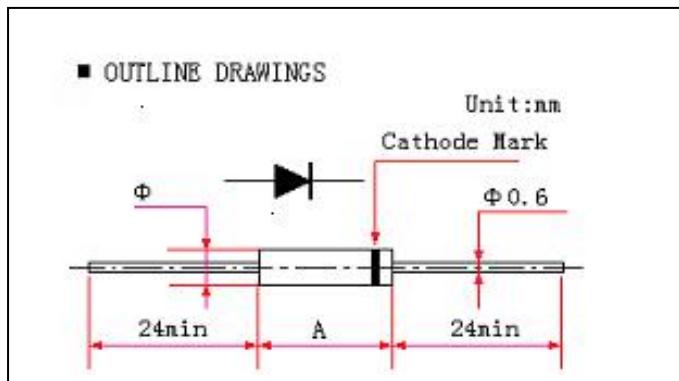
### ■ Maximum ratings

| Parameters                      | Symbol    | Test Conditions   | 2CL     | Unit |
|---------------------------------|-----------|---|---------|------|
|                                 |           |   | 82      |      |
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | $T_a=25^\circ C$ $I_R=0.5\mu A$                                     | 30      | kV   |
| Average Forward Current         | $I_o$     |   | 10.0    | mA   |
| Surge Forward Current           | $I_{FSM}$ | 50Hz Half-sine Wave ,<br>Resistance load<br>$@T_{break}=50^\circ C$ | 0.5     | A    |
| Junction Operating Temperature  | $T_j$     | Half sine wave peak voltage   | 120     | °C   |
| Operating Ambient Temperature   | $T_c$     |   | 100     | °C   |
| Storage Temperature             | $T_{stg}$ |   | -40—120 | °C   |

### ■ Electrical characteristics

| Rated Value               | Sign     | Condition                     | 2CL | Unit    |
|---------------------------|----------|-------------------------------|-----|---------|
|                           |          |                               | 82  |         |
| Forward Peak Voltage Max  | V        | $I_F=10mA$                    | 55  | V       |
| Reverse Recovery Time Max | $T_{rr}$ | $I_F=2mA$ $I_R=4mA$           | 100 | nS      |
| Peak Reverse Current      | $I_{R1}$ | $V_R=V_{RRM}$ , $25^\circ C$  | 2.0 | $\mu A$ |
|                           | $I_{R2}$ | $V_R=V_{RRM}$ , $100^\circ C$ | 5.0 | $\mu A$ |
| Junction capacitance Max  | $C_j$    |                               | 2   | pF      |

## ■ Dimensions



| Type  | A  | $\Phi$ |
|-------|----|--------|
| 2CL82 | 12 | 3.0    |