

## 2CML150KV/2A Product Data

High voltage rectifier diodes 2CML150KV/2A series adopt high reliable mesa structure and diffusion craftwork, epoxy resin molded in a compact structure.

### ■ Feature

- Avalanche characteristic
- More sizes to choose
- epoxy resin molded in vacuum, have anticorrosion in the surface
- Operating junction temperature Tj: -40℃—+150℃

### ■ Application

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

### ■ Maximum Ratings

| Item                            | Symbol    | Conditions                                                                | 2CML     | Unit |
|---------------------------------|-----------|---------------------------------------------------------------------------|----------|------|
|                                 |           |                                                                           | 150KV/2A |      |
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | $T_a=25^{\circ}\text{C}$ $I_R=5\mu\text{A}$                               | 150      | kV   |
| Average Forward Current         | $I_O$     |                                                                           | 2        | A    |
| Surge Forward Current           | $I_{FSM}$ | (50Hz Half-sine Wave , Resistance load @ $T_{break}=50^{\circ}\text{C}$ ) | 120      | A    |
| Junction Operating Temperature  | Tj        | Halfsine wave peak voltage                                                | -40—+150 | ℃    |
| Operating Ambient Temperature   | Tc        |                                                                           | 100      | ℃    |
| Storage Temperature             | Tstg      |                                                                           | -40—120  | ℃    |

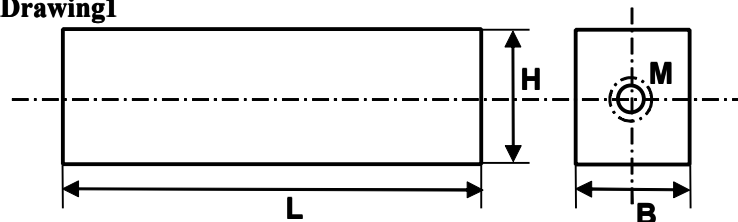
### ■ Electrical Characteristics

| Rated Value                                | Symbol   | Conditions                                            | 2CML     | Unit          |
|--------------------------------------------|----------|-------------------------------------------------------|----------|---------------|
|                                            |          |                                                       | 150KV/2A |               |
| Forward Peak Voltage Max (Reference Value) | V        | <b><math>I_F=2\text{A } 40^{\circ}\text{C}</math></b> | 175      | V             |
| Reverse Recovery Time Max                  | Trr      |                                                       | 100      | nS            |
| Peak Reverse Current (Reference Value)     | $I_{R1}$ | $V_R=V_{RRM}$ , $25^{\circ}\text{C}$                  | 5.0      | $\mu\text{A}$ |
|                                            | $I_{R2}$ | $V_R=V_{RRM}$ , $100^{\circ}\text{C}$                 | 50.0     | $\mu\text{A}$ |

## Dimension

| Type1         | L   | B  | H  | Electrode |
|---------------|-----|----|----|-----------|
| 2CMLG150KV/2A | 220 | 60 | 25 | M6        |

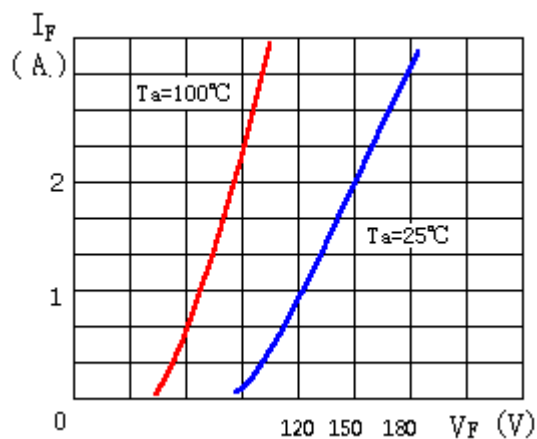
Drawing1



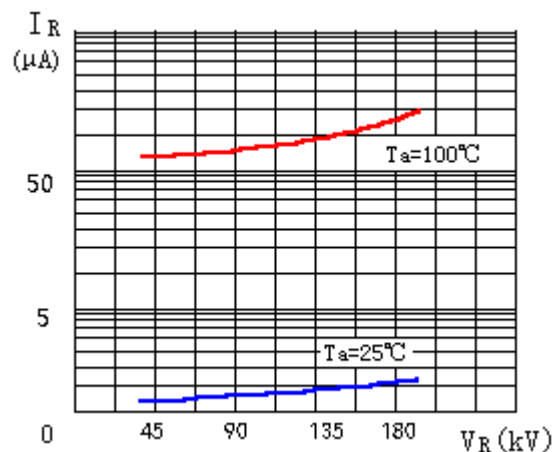
## Notice:

Please do cooling treatment if the surface temperature is higher than 60℃ when the diode rectifier is working. It will be better used in oil immersion conditions.

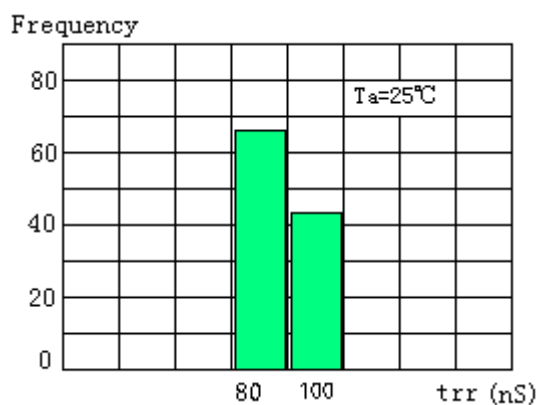
## Characteristic Curve



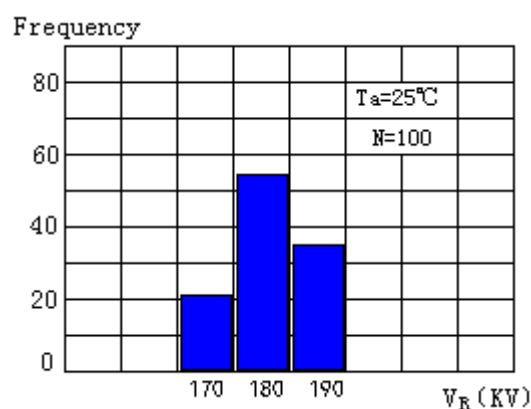
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution

## Reverse Recovery Time Basic Test Circuit

