

## 参数表

**2CL10KV/1A** 高压硅堆采用高可靠性的台面结构及扩散工艺，环氧树脂真空灌注密闭封装。

**2CL10KV/1A** High voltage silicon assembly adopts high reliable mesa structure with the diffusion craft work, and epoxy resin molded in a compact structure.

### ▼ 产品特点 Feature

- ❖ 雪崩电压击穿保护特性 **Avalanche Characteristic**
- ❖ 优异的抗浪涌电流冲击特性 **Excellent surge current resistance**
- ❖ 高速开关响应特性 **High speed switch response characteristics**
- ❖ 采用新型环氧树脂真空封装技术，表面具有抗腐蚀性  
**Epoxy resin molded in vacuum, have anticorrosion in the surface**
- ❖ 工作结温 -50°C—+175°C **Tj:50°C—+175°C**
- ❖ 特殊耐高温性能芯片，可承受严酷恶劣的使用条件
- ❖ **Special high temperature resistant chip that can withstand harsh working conditions**

### ▼ 产品 2D 图示

#### Graphical Representation

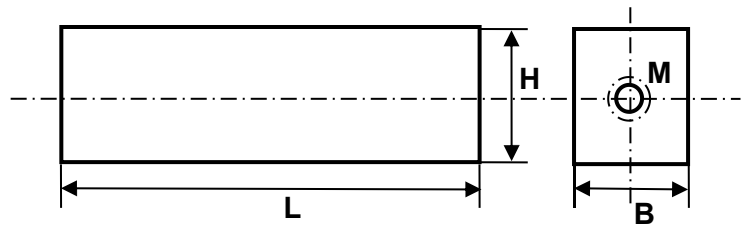


|   | 参数名称<br>Item                                | 符号<br>Symbol | 单位<br>Unit | 测试条件<br>Conditions  | 数值<br>Rating |
|---|---|--------------|------------|---|--------------|
| Absolute Maximum Ratings<br>极限值 (绝对最大值) | 反向重复峰值电压<br>Repetitive Peak Reverse Voltage | $V_{RRM}$    | KV         | Ta=25°C $I_R=2.0\mu A$  | 10           |
|   | 反向工作峰值电压)<br>Peak Working Reverse Voltage   | $V_{RWM}$    | KV         | Ta=25°C $I_R=2.0\mu A$  | 10           |
|   | 正向平均电流<br>Average Forward Current           | $I_{F(AV)}$  | A          | 正弦半波 50Hz, 电阻负载, $T_{break}=50^\circ C$<br>( 50Hz Half-sine Wave , Resistance load @ $T_{break}=50^\circ C$ ) | 1            |
|   | 反向恢复时间<br>Reverse Recovery Time             | trr          | nS         |   | --           |
|   | 正向(不重复)浪涌电流<br>Surge Forward Current        | $I_{FSM}$    | A          | 正弦半波持续时间 0.01S 50Hz<br>0.01S @ Half-Sine wave 50Hz  | 40           |
|   | 工作环境温度<br>Operating Ambient Temperature     | $T_a$        | °C         |   | -55 ~ +175   |
|   | 存贮温度<br>Storage Temperature                 | $T_{stg}$    | °C         |   | -40 ~ +125   |
| Electrical Characteristics<br>电特性       | 正向峰值电压<br>Forward Peak Voltage              | $V_{FM}$     | V          | @ Ta=25°C $I_F=1A$  | 12           |
|   | 反向峰值电流<br>Peak Reverse Current              | $I_{RRM1}$   | $\mu A$    | @ Ta=25°C $V_{RM}=V_{RRM}$  | 2.0          |
|   |   | $I_{RRM2}$   | $\mu A$    | @ Ta=100°C $V_{RM}=V_{RRM}$   | 20.0         |

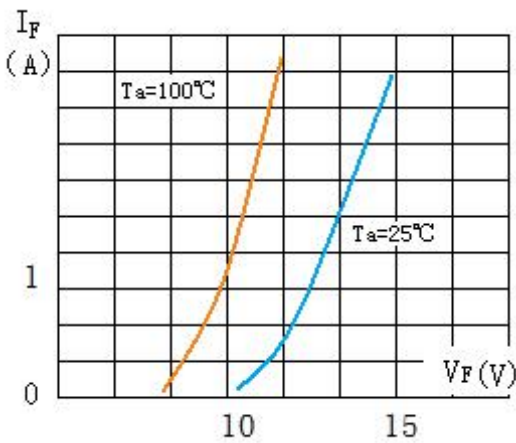
▼ 外形尺寸图示 Outline Drawings

(单位：毫米 mm)

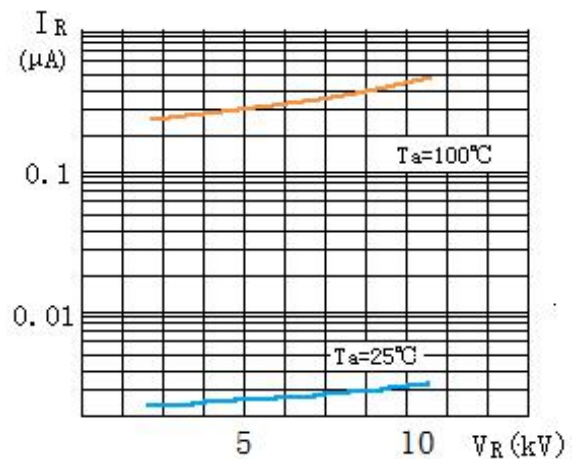
| 尺寸/<br>图号 | 长<br>(L) | 宽<br>(W) | 高<br>(H) | 电极<br>(M) |
|-----------|----------|----------|----------|-----------|
| Fig①      | 120      | 25       | 20       | 5         |
| Fig②      | 90       | 25       | 20       | 5         |



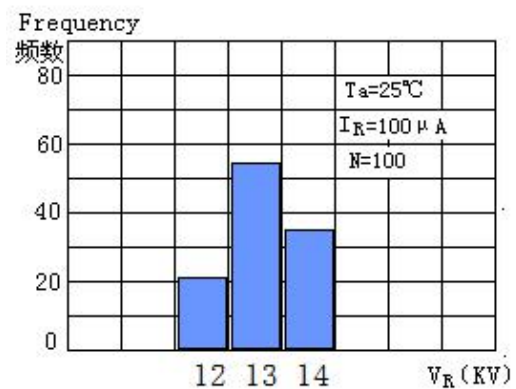
▼ 特性曲线图 Characteristic Curve



正向特性曲 ( 2CL10KV/1A )  
Forward Characteristics



反向特性曲线 ( 2CL10KV/1A )  
Reverse Characteristics



反向雪崩电压分布 ( 2CL10KV/1A )  
Avalanche Breakdown Voltage Distribution