

**2CL69~82** 型高压二极管采用高可靠的台面结构及扩散工艺，环氧树脂真空灌注成密闭的封装外形。

High voltage rectifier diodes 2CL69~82 Series adopts high reliable mesa structure and diffusion craftwork, epoxy resin molded in a compact structure.

### 最大额定值 ( Maximum ratings )

#### 特点 Features

- 雪崩特性 Avalanche characteristic
- 更多的外形尺寸可选 More sizes to choose
- 采用环氧树脂真密封装，表面具有抗腐蚀性 epoxy resin molded in vacuum, have anticorrosion in the surface
- 工作结温 -40 — +150 T<sub>j</sub>: -40 — +150

#### 应用 Applications

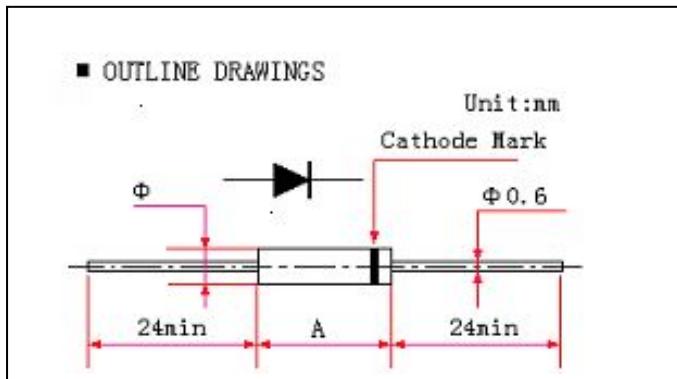
- 静电除尘用高压整流 High voltage rectifier used in electrostatic cleaning
- 高压发生器 High voltage generator
- 高压测试装置 High voltage testing equipment
- 一般高压电源整流，倍压装置 General purpose high voltage rectifier, voltage multiplier assembly

参数名称	符号	测试条件	2CL										单位	
			69	70	71	72	73	74	75	76	77	79	82	
反向重复峰值电压 Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	T <sub>a</sub> =25 I <sub>k</sub> =0.5μA	4	6	8	10	12	14	16	18	20	25	30	kV
正向平均整流电流 Average Forward Current	I <sub>f</sub>		5.0										mA	
非重复峰值浪涌电流 Surge Forward Current	I <sub>FSM</sub>	正弦半波 50Hz, 电阻负载, T <sub>break</sub> =50 ( 50Hz Half-sine Wave, Resistance load @ T <sub>break</sub> =50 )	0.5										A	
工作结温 Junction Operating Temperature	T <sub>j</sub>	正弦半波峰值电压 Half sine wave peak voltage	125											
允许工作环境温度 Operating Ambient Temperature	T <sub>c</sub>		100											
保存温度 Storage Temperature	T <sub>stg</sub>		-40—120											

#### 电气特性( Electrical characteristics)

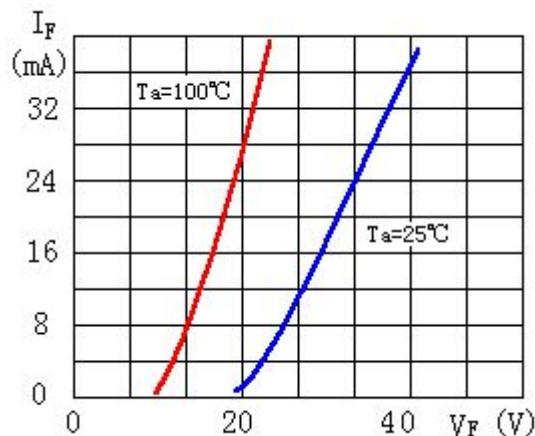
Rated Value	Sign	Condition	2CL										Unit	
			70	70	71	72	73	74	75	76	77	79	82	
最大正向峰值电压 Forward Peak Voltage Max	V	I=10mA	18	20	25	30	35	40	43	45	45	50	55	V
最大反向恢复时间 Reverse Recovery Time Max	T <sub>rr</sub>	I=2mA I <sub>k</sub> =4mA	0.08										μS	
最大反向漏电流 Peak Reverse Current	I <sub>R1</sub>	V <sub>R</sub> =V <sub>RRM</sub> , 25	2.0										μA	
	I <sub>R2</sub>	V <sub>R</sub> =V <sub>RRM</sub> , 100	5.0										μA	
最大结电容 Junction capacitance Max	C <sub>j</sub>		2										pF	

## 外形图示及尺寸 Outline and Sizes



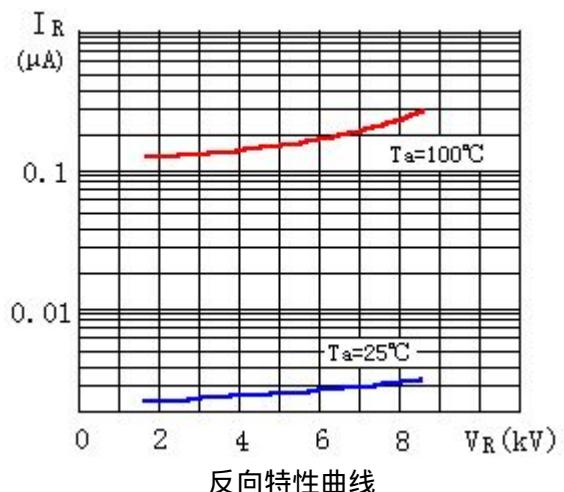
Type	A	
2CL69		
2CL70	8	
2CL71		
2CL72		10
2CL73		3
2CL74		
2CL75		
2CL76		
2CL77		12
2CL79		
2CL82		

## 特性曲线 Electric Characteristics



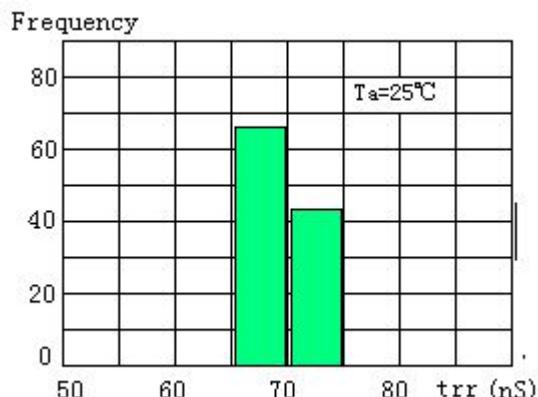
正向特性曲线

Forward Characteristics (2CL71)



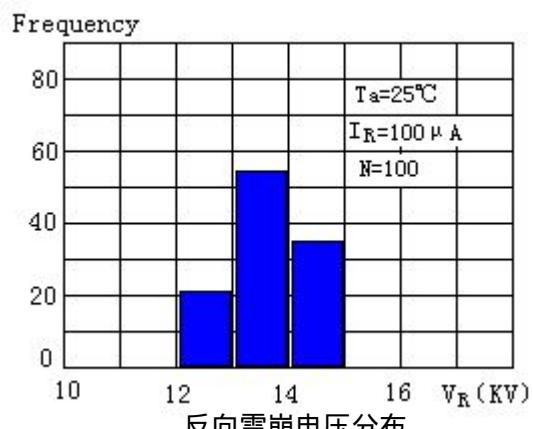
反向特性曲线

Reverse Characteristics (2CL71)



反向恢复时间分布

Reverse Recovery Time Distribution (2CL71)



反向雪崩电压分布

Avalanche Breakdown Voltage Distribution (2CL71)

## 反向恢复时间基本测试电路

