



2CL70 型高压二极管采用可靠性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 2CL70 adopts high reliable mesa structure and diffusion craftwork, epoxy resin molded in a compact sturcture.

■ 特点 Feature

- 雪崩特性 Avalanche characteristic
- 更多的外形尺寸可选 More sizes to choose
- 采用环氧树脂真空封装，表面具有抗腐蚀性
Epoxy resin molded in nacuuum, have anticorrosion in the surface
- 工作结温 $-40^{\circ}\text{C} \sim +150^{\circ}\text{C}$ $T_j: -40^{\circ}\text{C} \sim +150^{\circ}\text{C}$

■ 应用 Application

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

■ 最大额定值 (Maximum ratings)

参数名称	符号	测试条件	2CL	单位
			70	
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	$T_a=25^{\circ}\text{C}$ $I_R=2\mu\text{A}$	6	KV
正向平均整流电流 Average Forward Current	I_o		5	mA
非重复峰值浪涌电流 Surge Forward Current	I_{FSM}	正弦半波50Hz, 电阻负载 $T_{break}=50^{\circ}\text{C}$ (50Hz Half-sine Wave, Resistance load $T_{break}=50^{\circ}\text{C}$)	0.2	A
工作结温Junction Operating Temperature	T_j	正弦半波峰值电压 Halfsine wave peak voltage	125	$^{\circ}\text{C}$
允许工作环境温度 Operating Ambient Temperature	T_c		100	$^{\circ}\text{C}$
保存温度 Storage Temperature	T_{stg}		$-40 \sim +120$	$^{\circ}\text{C}$

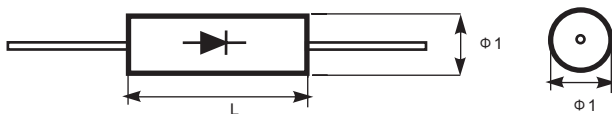
■ 电器特性 (Electrical characteristics)

Rated Value	Sign	Condition	2CL	Unit
			70	
最大正向峰值电压 Forward Peak Voltage Max	V_{FM}	$I_F=200\text{mA}$	20	V
最大反向恢复时间 Reverse Recovery Time Max	T_{rr}	$I_F=5\text{mA}$	100	nS
最大反向漏电流 Peak Reverse Current	I_{R1}	$V_R=V_{RRM}, 25^{\circ}\text{C}$	2.0	μA
	I_{R2}	$V_R=V_{RRM}, 100^{\circ}\text{C}$	5.0	μA
最大结电容 Junction capacitance Max	C_j		2.0	μF



外形图示及尺寸 (Dimension)

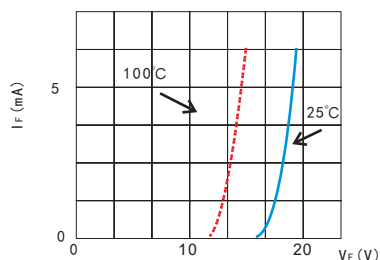
Fig



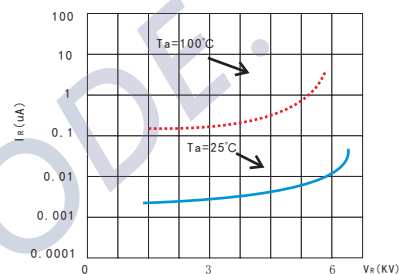
Dimension (Unit : mm)	A	B	C
Φ 1	2	2.5	3
L	4.8	6.5	8



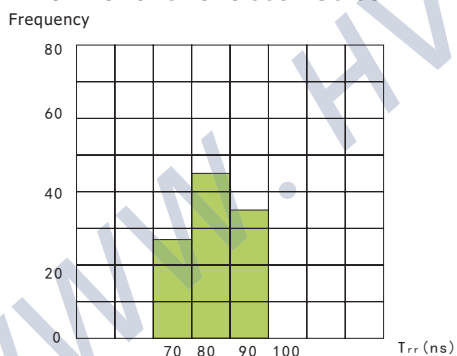
特性曲线 (Characteristics curve chart)



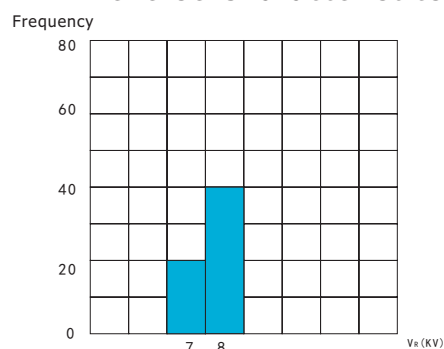
正向特性曲线(2CL70)
Forward characteristics



反向特性曲线(2CL70)
Reverse Characteristics



反向恢复时间分布(2CL70)
Reverse Recovery Time Distribution



反向雪崩电压分布(2CL70)
Avalanche Breakdown Voltage Distribution

反向恢复时间基本测试电路 (Reverse Recovery Time Basic Test Circuit)

