

CL15KV/500mA Products Data

High voltage rectifier diodes CL15KV/500mA Series adopts high reliable mesa structure and diffusion craftwork, epoxy resin molded in a compact structure.

■ Maximum Ratings

■ Feature

- Avalanche characteristic
- More sizes to choose
- Epoxy resin molded in vacuum, have anticorrosion in the surface
- Operating Junction Temperature Tj: -40°C—+175°C

■ Application

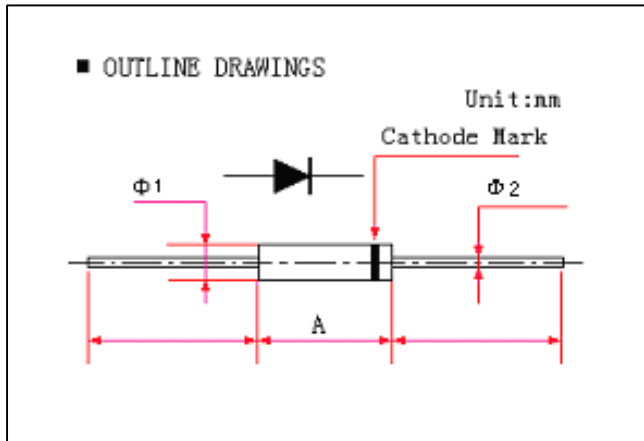
- High voltage rectifier used in electrostatic cleaning
- High voltage generator
- High voltage testing equipment
- General purpose high voltage rectifier, voltage multiplier assembly

Item	Symbol	Conditions	CL	Unit
			15KV/500mA	
Repetitive Peak Reverse Voltage	V_{RRM}	Ta=25°C I _R =0.5μA	15	kV
Average Forward Current	I _O		500	mA
Surge Forward Current	I _{FSM}	(50Hz Half-sine Wave , Resistance load @T _{break} =50°C)	30	A
Operating Junction Temperature	Tj	Halfsine wave peak voltage	-40~+175	°C
Operating Ambient Temperature	Tc		-40~+175	°C

■ Electrical Characteristics

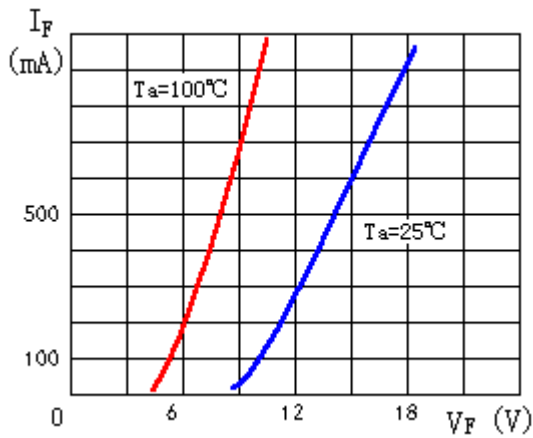
Rated Value	Symbol	Condition	CL	Unit
			15KV/500mA	
Forward Peak Voltage Max (Reference Value)	V	I _F =500mA,40°C	16.5	V
Reverse Recovery Time Max	T _{rr}	I _F =2mA I _R =4mA	100	nS
Peak Reverse Current (Reference Value)	I _{R1}	V _R =V _{RRM} , 25°C	2.0	μA
	I _{R2}	V _R =V _{RRM} , 100°C	5.0	μA
Junction capacitance Max	C _j		2	pF

■ Dimensions

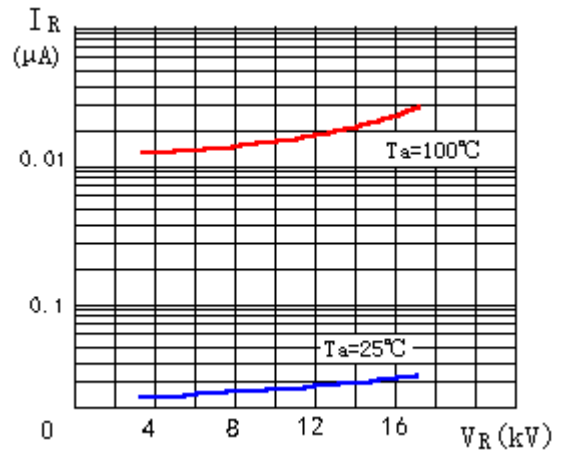


Type	A(mm)	Φ_1 (mm)
CL15KV/500mA	22	7.5

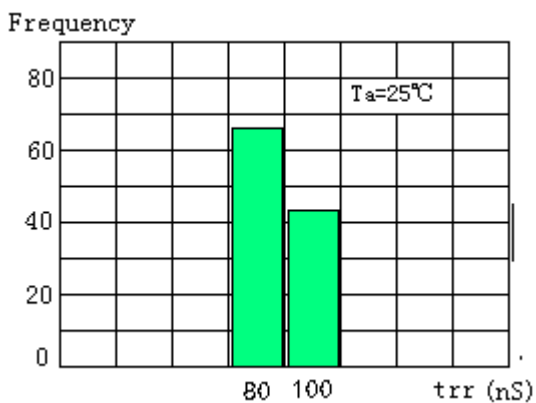
■ Characteristic Curve



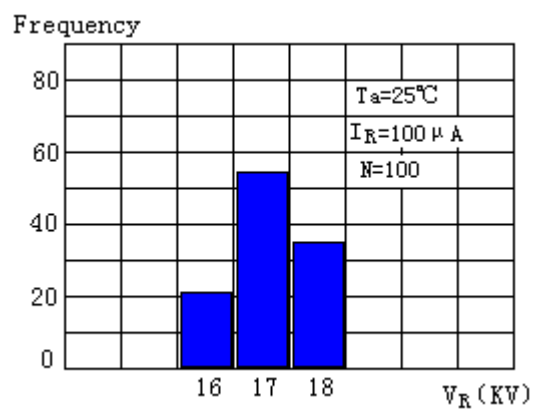
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution

Reverse Recovery Time Basic Test Circuit

