

2CL20KV/20mA Product Data

High voltage rectifier diodes 2CL20KV/20mA 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—+150°C

■ Application

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

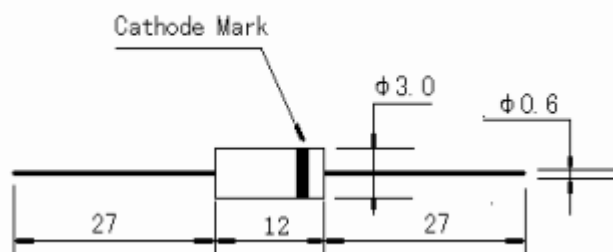
Item	Symbol	Conditions	2CL	Unit
			20KV/20mA	
Repetitive Peak Reverse Voltage	V_{RRM}	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	20	kV
Peak Working Reverse Voltage	V_{RWM}	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	20	kV
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	22	kV
Average Forward Current	$I_{F(AV)}$	(50Hz Half-sine Wave , Resistance load @ $T_{break}=50^{\circ}\text{C}$)	20	mA
Reverse Recovery Time	trr	$I_F=50\text{mA}$ $I_R=100\text{mA}$ $IRR=25\text{mA}$	100	nS
Surge Forward Current	I_{FSM}	0.01S @Half-Sine 50Hz	40	A
Operating Ambient Temperature	T_a		-40~+125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}		-40~+125	$^{\circ}\text{C}$

■ Electrical Characteristics

Rated Value	Symbol	Condition	2CL	Unit
			20KV/20mA	
Forward Peak Voltage Max (Reference Value)	V_{FM}	$I_F=2.0\text{A } 25^{\circ}\text{C}$	45	V
Peak Reverse Current (Reference Value)	I_{R1}	$V_R=V_{RRM}$, 25°C	10	μA
	I_{R2}	$V_R=V_{RRM}$, 100°C	75	μA

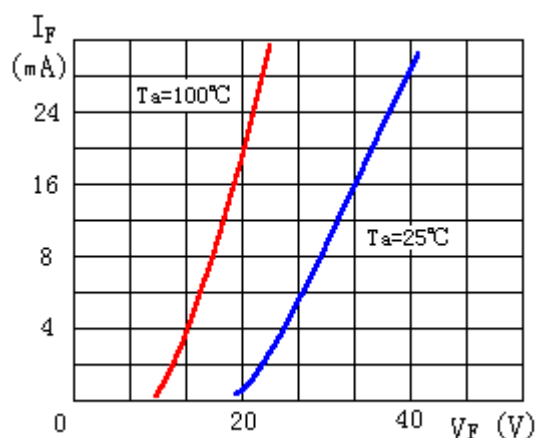
Dimension

OUTLINE DRAWINGS

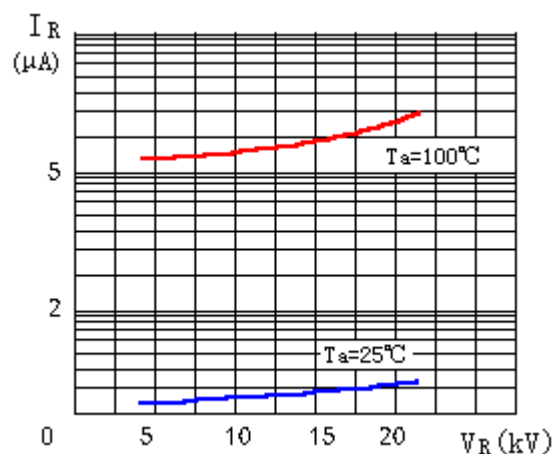


Type	A	Φ1
2CL20KV/20mA	12	3

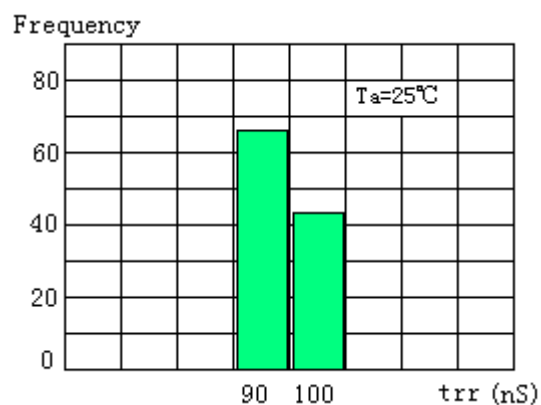
Characteristic Curve



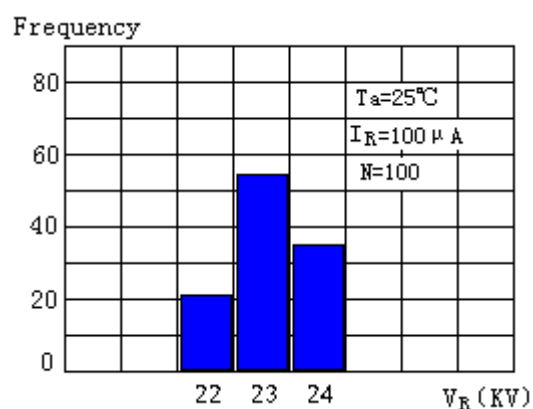
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution

Reverse Recovery Time Basic Test Circuit

