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℃—+150℃

■ Application

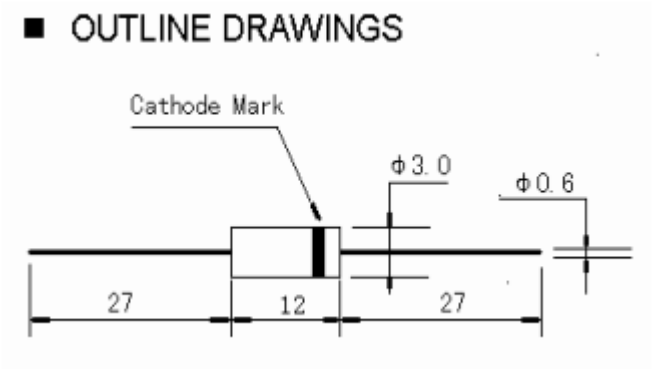
- High voltage rectifier used in electrostatic cleaning
- High voltage generator
- High voltage testing equipment
- General purpose high voltage rectifier, voltage multiplier assembly

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

■ Electrical Characteristics

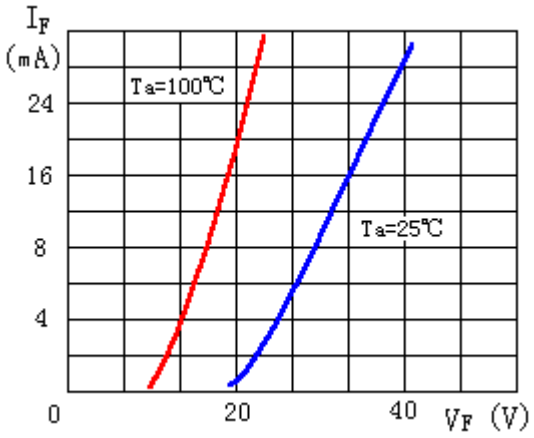
Rated Value	Symbol	Condition	2CL	Unit
			20KV/20mA	
Forward Peak Voltage Max (Reference Value)	V_{FM}	**I_F=2.0A 25℃**	45	V
Peak Reverse Current (Reference Value)	I_{R1}	V_R=V_{RRM} ， 25℃	10	μA
	I_{R2}	V_R=V_{RRM} ， 100℃	75	μA

■ Dimension

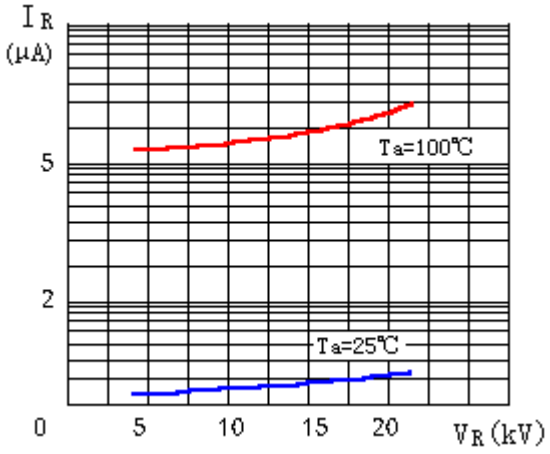


Type	A	Φ1
2CL20KV/20mA	12	3

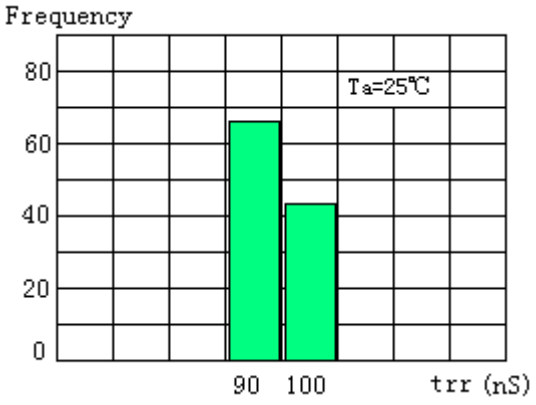
■ Characteristic Curve



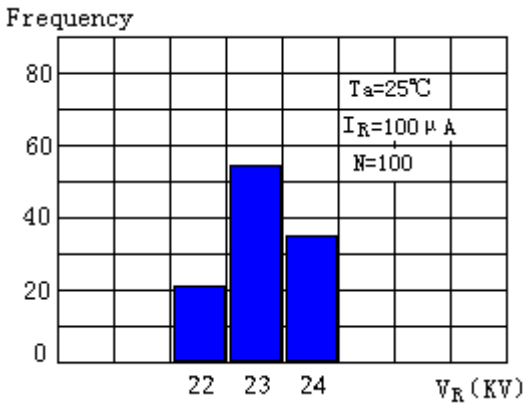
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution

Reverse Recovery Time Basic Test Circuit