2DGL5A /40KV Product Data

High voltage rectifier diodes 2DGL5A /40KV series adopt high reliable mesa structure and diffusion craftwork, epoxy resin molded in a compact structure.

■ 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

■ Maximum Ratings

Item	Symbol	Conditions	2DGL	Unit
			5A /40KV	
Repetitive Peak Reverse Voltage	V_{RRM}	Ta=25℃ I_R=5μA	40	kV
Average Forward Current	I_O		5	A
Surge Forward Current	I_{FSM}	（50Hz Half-sine Wave , Resistance load @T_{break}=50℃）	150	A
Operating Junction Temperature	Tj	Halfsine wave peak voltage	-40—+150	℃
Operating Ambient Temperature	Tc		100	℃
Storage Temperature	Tstg		-40—120	℃

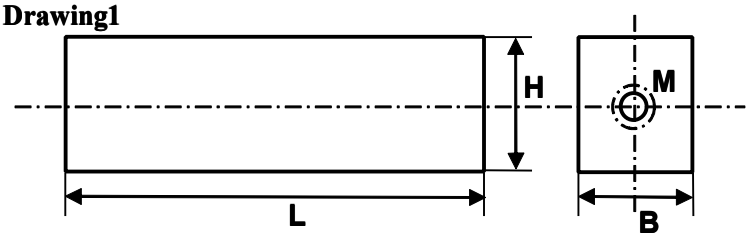
■ Electrical Characteristics

Rated Value	Symbol	Conditions	2DGL	Unit
			5A /40KV	
Forward Peak Voltage Max (Reference Value)	V	**I_F=5.0A 40℃**	46	V
Reverse Recovery Time Max	Trr		100	nS
Peak Reverse Current (Reference Value)	I_{R1}	V_R=V_{RRM} ， 25℃	10.0	μA
	I_{R2}	V_R=V_{RRM} ， 100℃	200.0	μA

■ Dimension

Type	L	B	H	Electrode
2DGL5A /40KV	180	50	20	M5
2DGL5A /40KV	150	25	25	M6

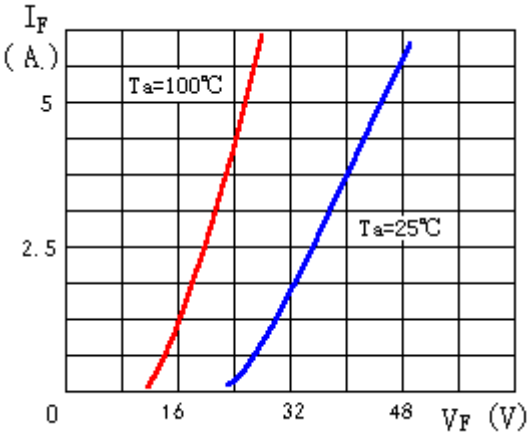
Drawing1



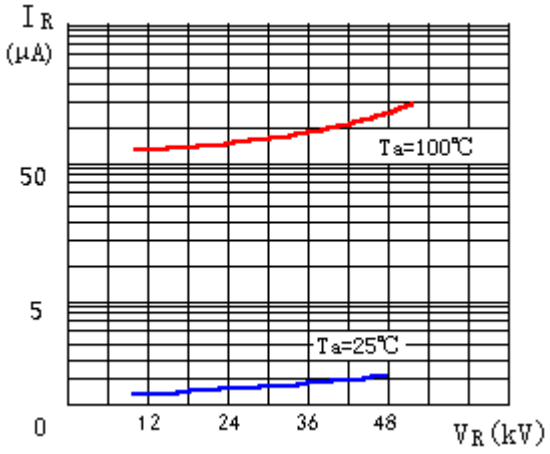
Notice:

Please do cooling treatment is the surface temperature is higher than 60℃ when the diode rectifier is working. It will be better used in oil immersion conditions.

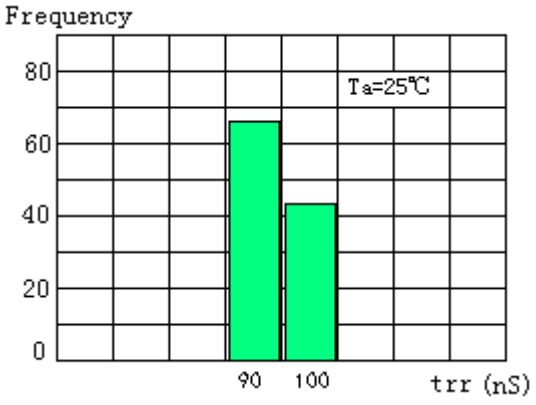
■ Characteristic Curve



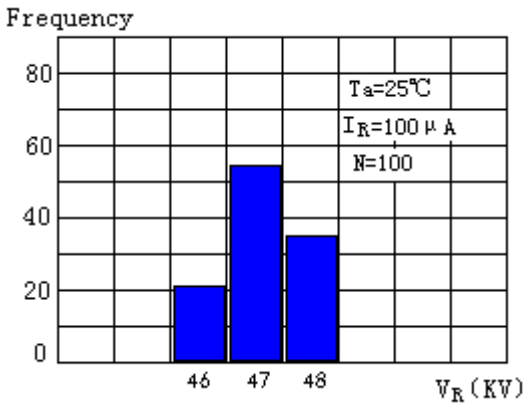
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution

Reverse Recovery Time Basic Test Circuit

