

3QLG5~300KV/5.0A Product Data

High frequency high voltage bridge rectifier **3QLG5~300KV/5.0A** adopts 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°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

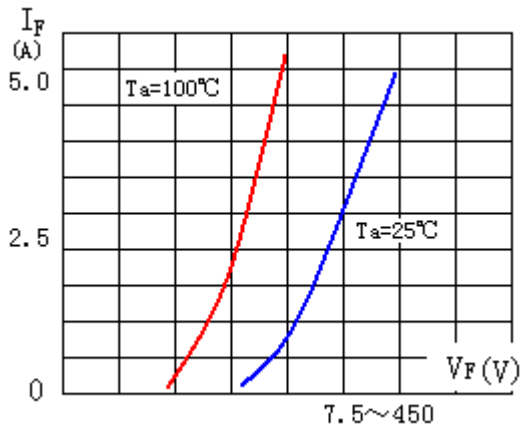
■ Limiting Value (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Data
Repetitive Peak Reverse Voltage (Single Arm)	V_{RRM}	KV	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	5~300.0
Peak Working Reverse Voltage (Single Arm)	V_{RWM}	KV	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	5~300.0
Non-Repetitive Peak Reverse Voltage (Single Arm)	V_{RSM}	KV	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	6~360.0
Average Forward Current	$I_{F(AV)}$	A	(50KHz Half-sine Wave , Resistance load @ $T_{break}=50^{\circ}\text{C}$)	5.0
Reverse Recovery Time	trr	nS	$I_F=50\text{mA}$ $I_R=100\text{mA}$ $I_{RR}=25\text{mA}$	100/300
Surge Forward Current	I_{FSM}	A	0.01S @ Half-Sine wave 50Hz	200.0
Operating Ambient Temperature	T_a	$^{\circ}\text{C}$		-40~+125
Storage Temperature	T_{stg}	$^{\circ}\text{C}$		-40~+125

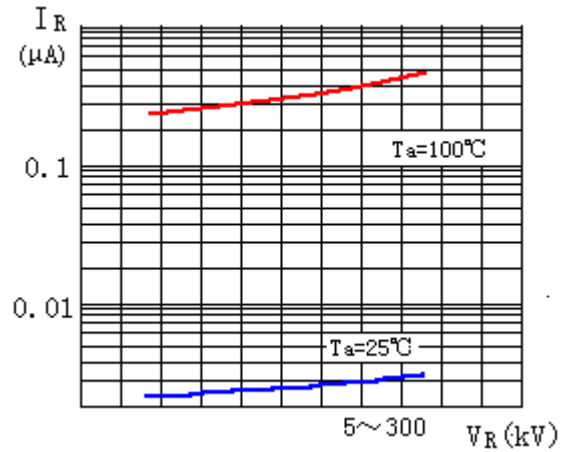
■ Electrical Characteristic (Ta=25°C Unless Otherwise Specified)

Forward Peak Voltage (Single Arm; Reference Value)	V_{FM}	V	@ $T_a=25^{\circ}\text{C}$ $I_F=0.02\text{A}$	7.5~450.0
Peak Reverse Current (Reference Value)	I_{RRM1}	μA	@ $T_a=25^{\circ}\text{C}$ $V_{RM}=V_{RRM}$	5.0
	I_{RRM2}	μA	@ $T_a=100^{\circ}\text{C}$ $V_{RM}=V_{RRM}$	100.0

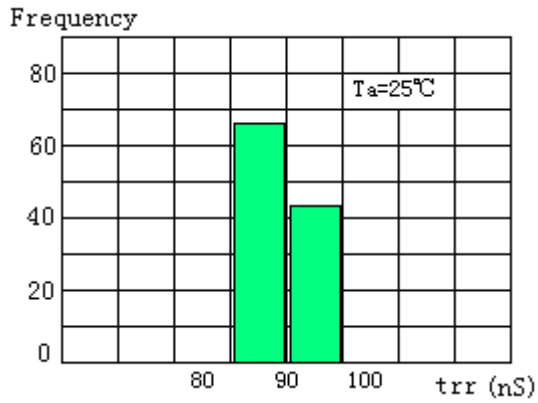
■ Characteristic Curve



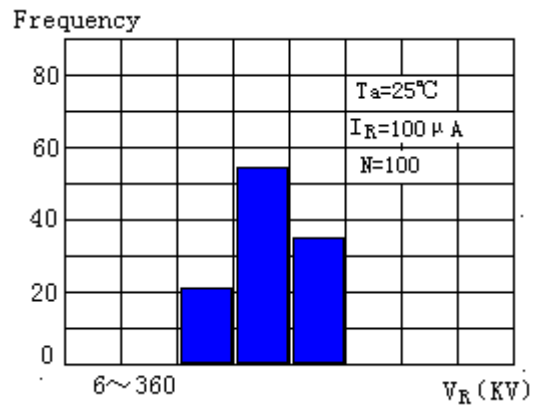
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution