

## 3QLG5~500KV/0.05A Product Data

High frequency high voltage 3-phase rectifier bridge **3QLG5~500KV/0.05A** 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

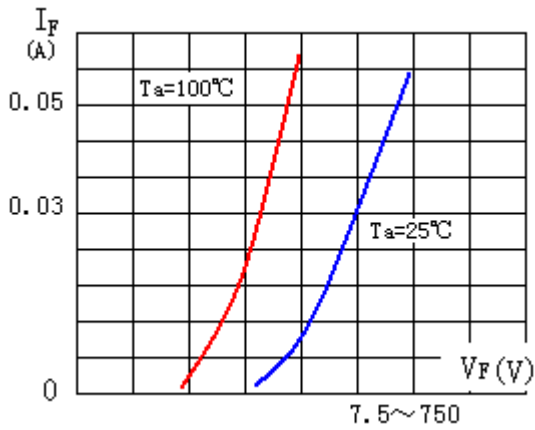
### ■ Limiting Value (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Data
Repetitive Peak Reverse Voltage (Single Arm)	$V_{RRM}$	KV	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	5~500.0
Peak Working Reverse Voltage (Single Arm)	$V_{RWM}$	KV	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	5~500.0
Non-Repetitive Peak Reverse Voltage (Single Arm)	$V_{RSM}$	KV	$T_a=25^{\circ}\text{C}$ $I_R=1.0\mu\text{A}$	6~600.0
Average Forward Current	$I_{F(AV)}$	A	( 50KHz Half-sine Wave , Resistance load @ $T_{break}=50^{\circ}\text{C}$ )	0.05
Reverse Recovery Time	trr	nS	$I_F=50\text{mA}$ $I_R=100\text{mA}$ $I_{RR}=25\text{mA}$	80/100
Surge Forward Current	$I_{FSM}$	A	0.01S @ Half-Sine wave 50Hz	5.0
Operating Ambient Temperature	$T_a$	°C		-40~+125
Storage Temperature	$T_{stg}$	°C		-40~+125

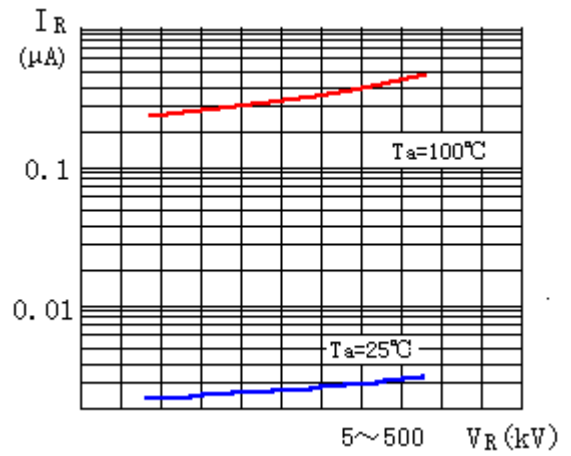
### ■ Electrical Characteristic (Ta=25°C Unless Otherwise Specified)

Forward Peak Voltage (Single Arm; Reference Value)	$V_{FM}$	V	@ $T_a=25^{\circ}\text{C}$ $I_F=0.02\text{A}$	7.5~750.0
Peak Reverse Current (Reference Value)	$I_{RRM1}$	$\mu\text{A}$	@ $T_a=25^{\circ}\text{C}$ $V_{RM}=V_{RRM}$	5.0
	$I_{RRM2}$	$\mu\text{A}$	@ $T_a=100^{\circ}\text{C}$ $V_{RM}=V_{RRM}$	50.0

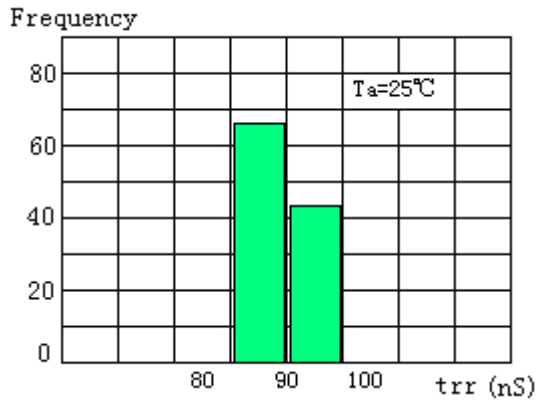
■ Characteristic Curve



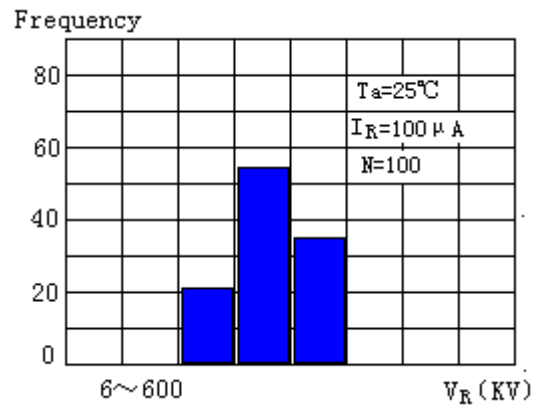
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution