

## QLG5~500KV/0.02A Product Data

High voltage bridge rectifier QLG5~500KV/0.02A 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

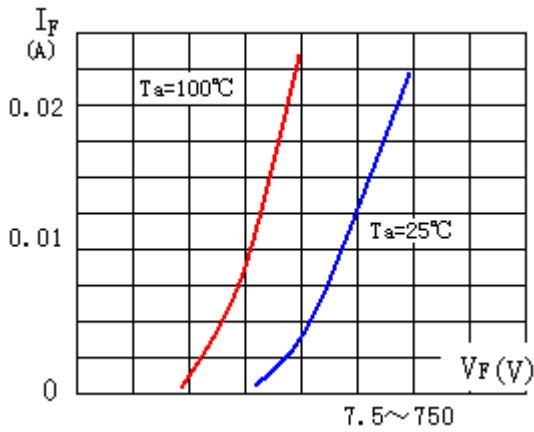
### ■ Limiting Value (Absolute Maximum Rating)

| 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 @ $T_{break}=50^{\circ}\text{C}$ ) | 0.02     |
| 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   | 0.5      |
| Operating Ambient Temperature                    | $T_a$       | °C   |   | -40~+125 |
| Storage Temperature                              | $T_{stg}$   | °C   |   | -40~+125 |

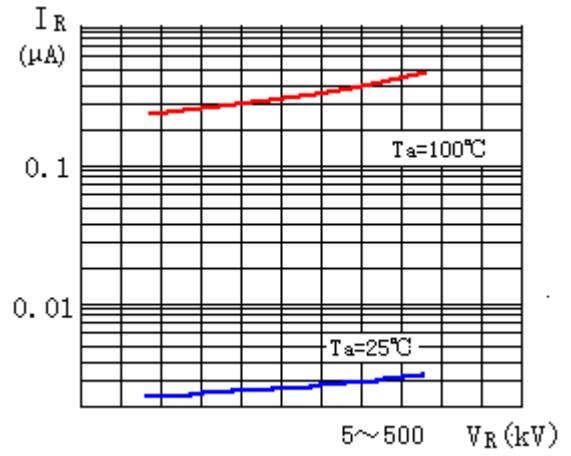
### ■ Electrical Characteristic (Ta=25°C Unless Otherwise Specified)

|  |            |               |   |           |
|--|------------|---------------|---|-----------|
| 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)             | $I_{RRM1}$ | $\mu\text{A}$ | @ $T_a=25^{\circ}\text{C}$ $V_{RM}=V_{RRM}$   | 2.0       |
|  | $I_{RRM2}$ | $\mu\text{A}$ | @ $T_a=100^{\circ}\text{C}$ $V_{RM}=V_{RRM}$  | 50.0      |

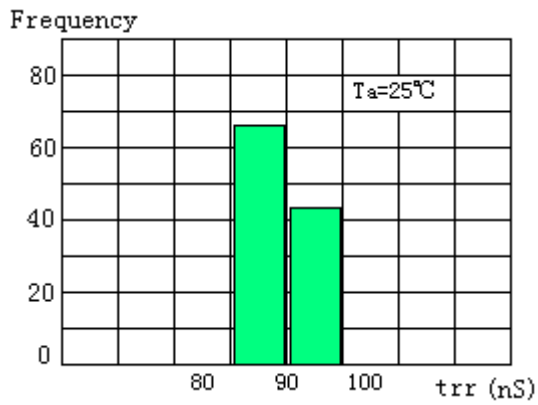
■ Characteristic Curve



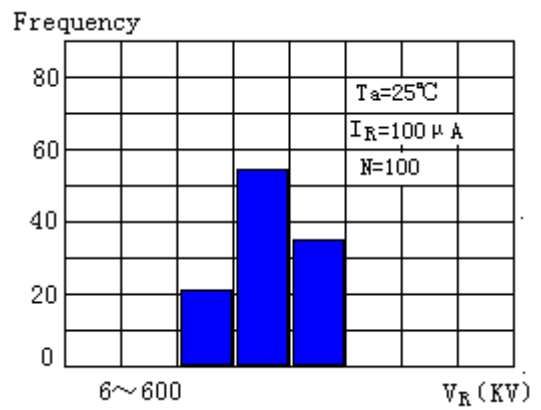
Forward Characteristics



Reverse Characteristics



Reverse Recovery Time Distribution



Avalanche Breakdown Voltage Distribution