# QLG5~500KV/1.5A Product Data

High voltage bridge rectifier **QLG5~500KV/1.5A** 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℃—+150℃

## ■ Application

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

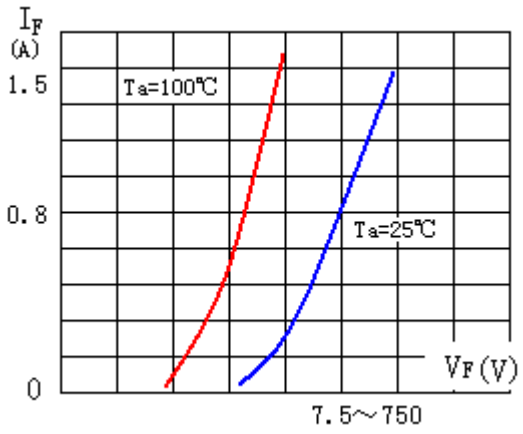
## ■ Limiting Value（Absolute Maximum Rating）

| Item | Symbol | Unit | Conditions | Data |
|---|---|---|---|---|
| Repetitive Peak Reverse Voltage （Single Arm） | $V_{RRM}$ | KV | Ta=25℃ $I_R$=1.0μA | 5~500.0 |
| Peak Working Revere Voltage （Single Arm） | $V_{RWM}$ | KV | Ta=25℃ $I_R$=1.0μA | 5~500.0 |
| Non-Repetitive Peak Reverse Voltage （Single Arm） | $V_{RsM}$ | KV | Ta=25℃ $I_R$=1.0μA | 6~600.0 |
| Average Forward Current | $I_{F(AV)}$ | A | （50KHz Half-sine Wave，Resistance load @$T_{break}$=50℃） | 1.5 |
| Reverse Recovery Time | trr | nS | $I_F$=50mA $I_R$=100mA $I_{RR}$=25mA | 100/150 |
| Surge Forward Current | $I_{FSM}$ | A | 0.01S @ Half-Sine wave 50Hz | 50.0 |
| Operating Ambient Temperature | $T_a$ | ℃ | | -40～+125 |
| Storage Temperature | $T_{stg}$ | ℃ | | -40～+125 |

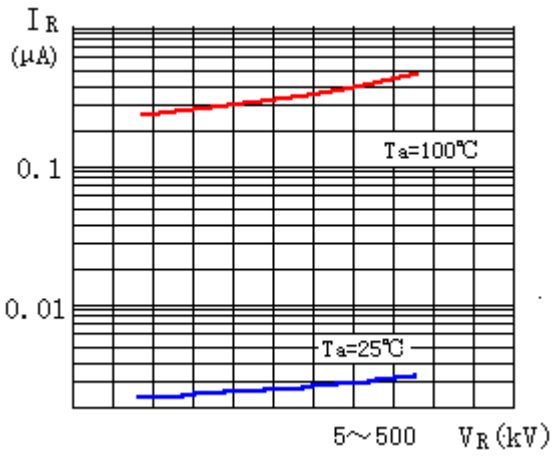
## ■ Electrical Characteristic（Ta=25℃ Unless Otherwise Specified）

| | | | | |
|---|---|---|---|---|
| Forward Peak Voltage （Single Arm; Reference Value） | $V_{FM}$ | V | @ Ta=25℃ $I_F$=0.02A | 7.5~750.0 |
| Peak Reverse Current （Reference Value） | $I_{RRM1}$ | μA | @ Ta=25℃ $V_{RM}$=$V_{RRM}$ | 5.0 |
| | $I_{RRM2}$ | μA | @ Ta=100℃ $V_{RM}$=$V_{RRM}$ | 100.0 |

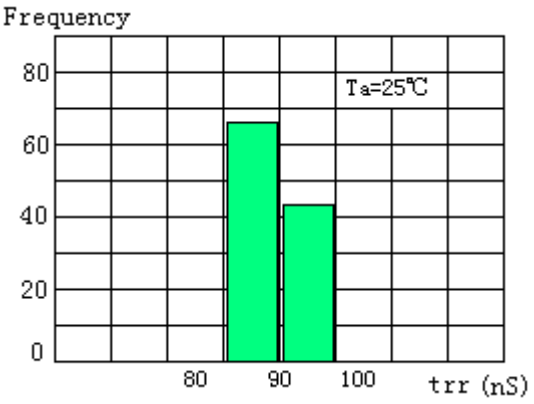
## ■ Characteristic Curve



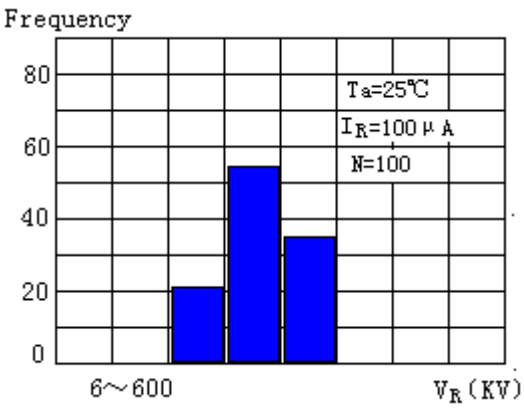

Forward Characteristics




Reverse Characteristics




Reverse Recovery Time Distribution




Avalanche Breakdown Voltage Distribution