

## QL5~300KV/5.0A Product Data

High voltage bridge rectifier **QL5~300KV/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

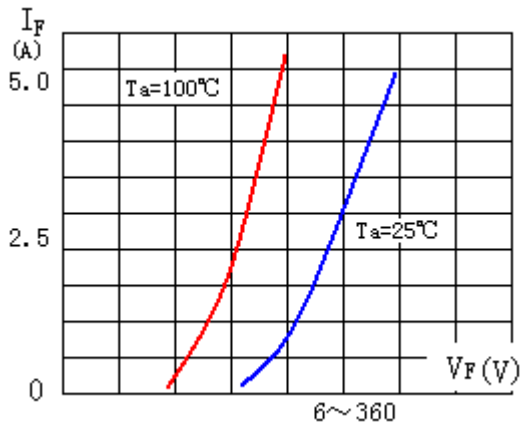
### ■ Limiting Value (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	Data
Repetitive Peak Reverse Voltage (Single Arm)	$V_{RRM}$	KV	Ta=25°C I <sub>R</sub> =1.0μA	5~300.0
Peak Working Reverse Voltage (Single Arm)	$V_{RWM}$	KV	Ta=25°C I <sub>R</sub> =1.0μA	5~300.0
Non-Repetitive Peak Reverse Voltage (Single Arm)	$V_{RSM}$	KV	Ta=25°C I <sub>R</sub> =1.0μA	6~360.0
Average Forward Current	$I_{F(AV)}$	A	(50KHz Half-sine Wave, Resistance load @T <sub>break</sub> =50°C)	5.0
Reverse Recovery Time	trr	nS	I <sub>F</sub> =50mA I <sub>R</sub> =100mA I <sub>RR</sub> =25mA	--
Surge Forward Current	$I_{FSM}$	A	0.01S @ Half-Sine wave 50Hz	200.0
Operating Ambient Temperature	T <sub>a</sub>	°C		-40~+125
Storage Temperature	T <sub>stg</sub>	°C		-40~+125

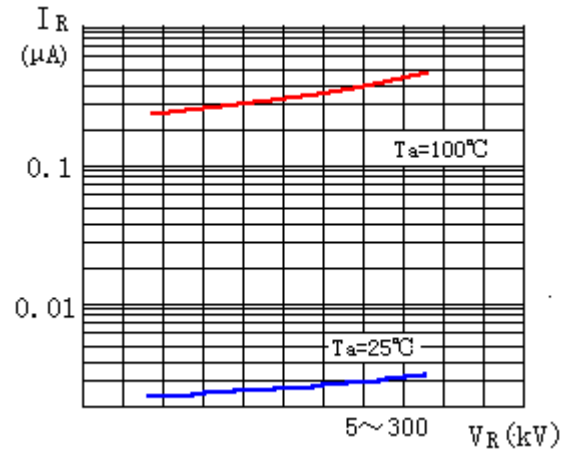
### ■ Electrical Characteristic (Ta=25°C Unless Otherwise Specified)

Forward Peak Voltage (Single Arm)	$V_{FM}$	V	@ Ta=25°C I <sub>F</sub> =0.02A	6.0~360.0
Peak Reverse Current	$I_{RRM1}$	μA	@ Ta=25°C V <sub>RM</sub> =V <sub>RRM</sub>	5.0
	$I_{RRM2}$	μA	@ Ta=100°C V <sub>RM</sub> =V <sub>RRM</sub>	100.0

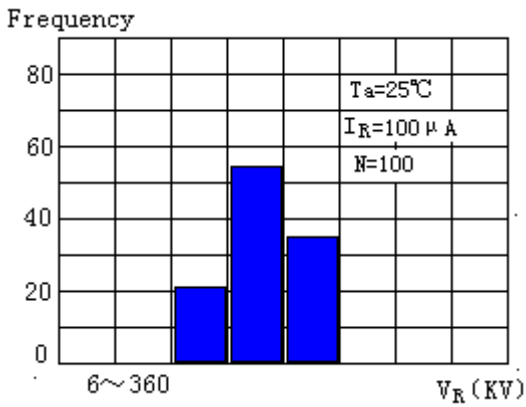
■ Characteristic Curve



Forward Characteristics



Reverse Characteristics



Avalanche Breakdown Voltage Distribution