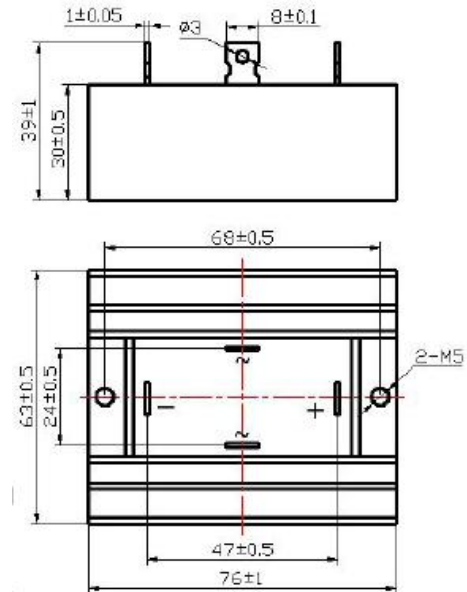
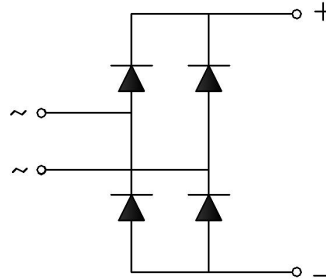


## Feature

- Low forward voltage drop
- Isolation voltage 2000V~
- Small volume, light weight
- Low thermal resistance, high heat-conductivity, low temperature rise

## Application

- Power supply for DC power device
- Input rectifier for PWM converter
- DC motor



## Maximum value

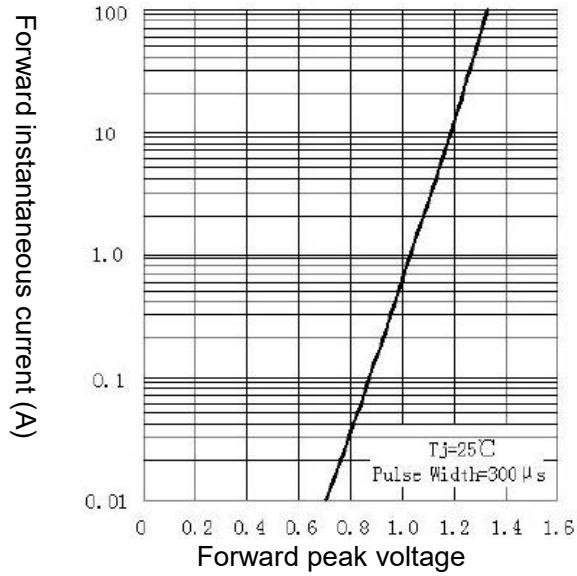
Symbol	Parameter	Rating	Unit
		QL5010S	
$V_{RRM}$	Reverse repetitive peak voltage	1000	V
$V_{RSM}$	Reverse non-repetitive peak voltage	1100	V

Symbol	Item	Conditions	Ratings	Unit
$I_{F(AV)}$	Forward average current	$T_C=55^\circ\text{C}$	50	A
$I_{FSM}$	Forward surge current	Sine 50Hz, $t=10\text{ms}$ , $T_j=25^\circ\text{C}$	500	A
$P_t$	$P_t$ value		1250	$\text{A}^2\text{S}$
$V_{ISO}$	Isolation voltage	50Hz, R.M.S, $t=1\text{min}$ , $I_{iso}:1\text{mA}(\text{max})$	2000	V
$T_j$	Operating junction temperature		-40 to +150	$^\circ\text{C}$
$T_{jm}$	Rated junction temperature		150	$^\circ\text{C}$
$T_{stg}$	Storage temperature		-40 to +125	$^\circ\text{C}$
$M_d$	Mounting torque M5		2	N·m
$W_t$	Weight		127	g

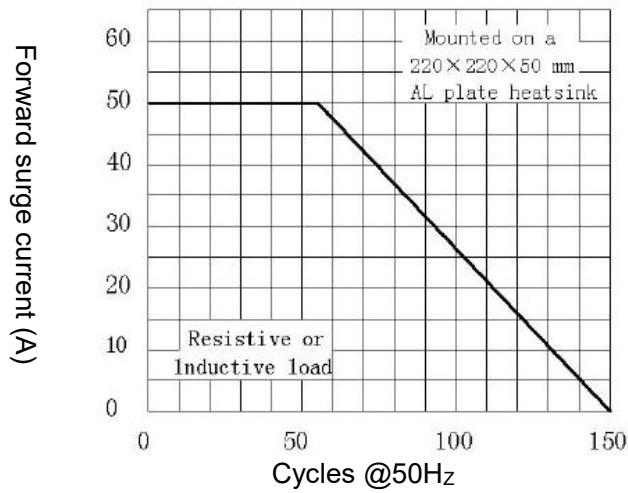
## Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
$I_{RRM}$	Reverse repetitive peak current	$V_R=V_{RRM}$ , $T_j=25^\circ\text{C}$	5	$\mu\text{A}$
		$V_R=V_{RRM}$ , $T_j=150^\circ\text{C}$	3	$\text{mA}$
$V_{FM}$	Forward peak voltage	$I_{FM}=75\text{A}$ , $T_j=25^\circ\text{C}$	1.3	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Side heat sink	1.6	$^\circ\text{C/W}$

Forward characteristics curve



Surge current characteristics curve



Forward av. current decrease curve

