

## Feature

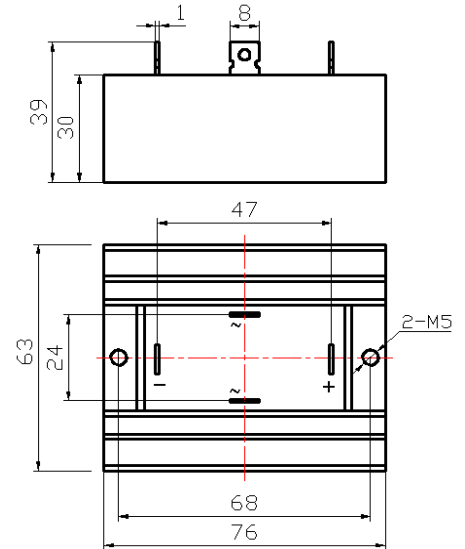
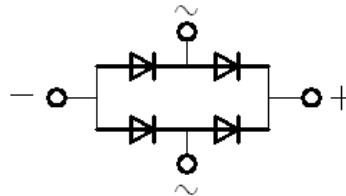
- Low forward voltage drop
- Isolation voltage 2000V ~

## Application

- Power supply for DC power device
- Input rectifier for PWM convertor
- Power supply for DC device

## Advantage

- Easy mounting
- Low thermal resistance, high heat-conduction rate, low temperature rise



### ■ Maximum value

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

Symbol	Parameter	Test condition	Rating	Unit
$I_F (AV)$	Forward average current	180°sine half-wave 50HZ single-sided heat dissipation $T_C=55^\circ\text{C}$	50	A
$I_{FSM}$	Forward surge current	$t=10\text{ms}, 50\text{HZ}, \text{sin}, T_{jm}$	450	A
$I^2t$	$I^2t$ value		840	$\text{A}^2\text{S}$
$V_{ISO}$	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		130	g

### ■ Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
$I_{RRM}$	Peak reverse repetitive current	$V_R=V_{RRM}$ , sine half-wave, $T_j=25^\circ\text{C}$	5	$\mu\text{A}$
		$V_R=V_{RRM}$ , sine half-wave $T_j=150^\circ\text{C}$	3	mA
$V_{FM}$	Peak forward voltage	$I_{FM}=75\text{A}$ , $T_j=25^\circ\text{C}$	1.3	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Single-sided heat dissipation, sine half-wave	1.6	$^\circ\text{C/W}$