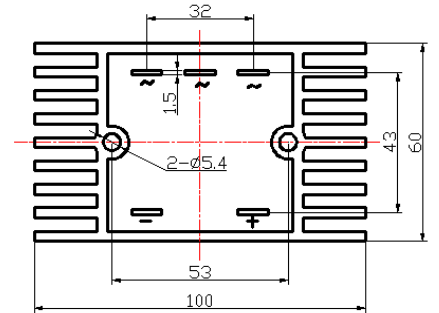
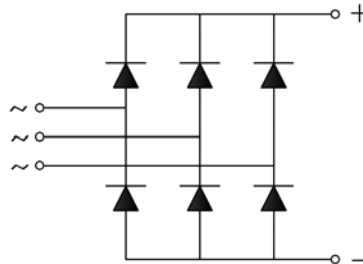
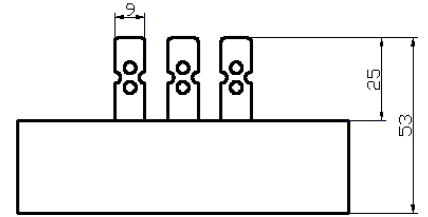


Feature

- Low forward voltage drop
- Isolation voltage 2000V ~
- Small volume, light weight
- Low thermal resistance, high heat-conductivity, low temperature rise
- UL certification E304417

Application

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



■ Maximum value

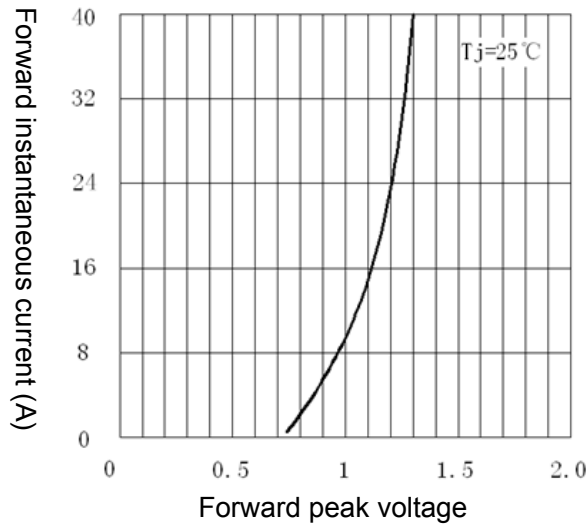
Symbol	Parameter	Rating	Unit
		SQL40A1200V	
V_{RRM}	Reverse repetitive peak voltage	1200	V
V_{RSM}	Reverse non-repetitive peak voltage	1300	V

Symbol	Item	Conditions	Ratings	Unit
$I_{F(AV)}$	Forward average current	$T_C=55^\circ\text{C}$	40	A
I_{FSM}	Forward surge current	Sine 50Hz, $t=10\text{ms}$, $T_j=25^\circ\text{C}$	400	A
I^2t	I^2t value		800	A^2S
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		270	g

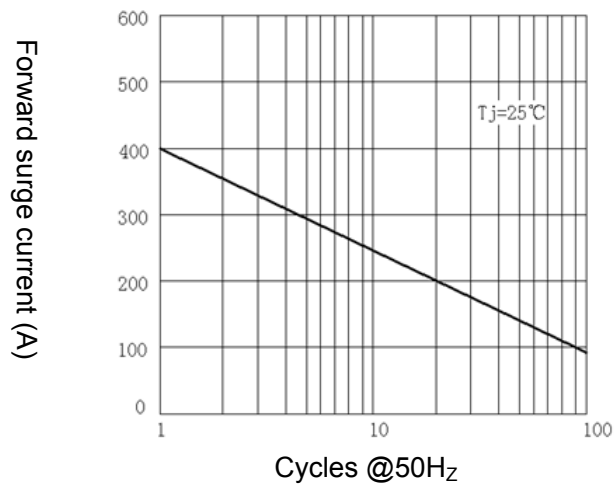
■ Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
I_{RRM}	Reverse repetitive peak current	$V_R=V_{RRM}$, $T_j=25^\circ\text{C}$	5	μA
		$V_R=V_{RRM}$, $T_j=150^\circ\text{C}$	5	mA
V_{FM}	Forward peak voltage	$I_{FM}=40\text{A}$, $T_j=25^\circ\text{C}$	1.3	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	All-side heat sink	1.6	$^\circ\text{C/W}$

Forward characteristics curve



Surge current characteristics curve



Forward av. current decrease curve

