

Feature

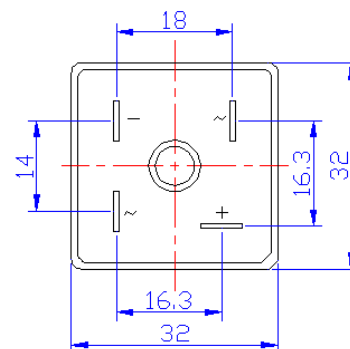
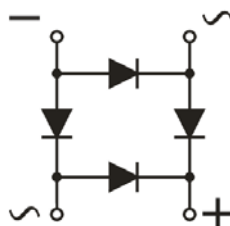
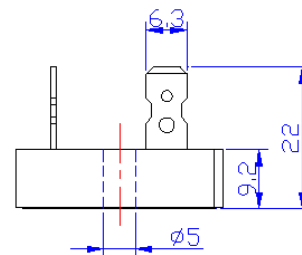
- 6.3mm standard pin
- Low forward voltage drop
- Isolation voltage 2000V ~
- UL registered E304417

Application

- Power supply for DC power device
- Input rectifier for PWM converter
- Power supply for DC device
- Welding machine

Advantage

- Easy mounting
- Small volume, light weight
- Low thermal resistance, high heat-conduction rate
- low temperature rise



Maximum value

Symbol	Parameter	Rating	Unit
		BR5010	
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 $T_C=55^{\circ}C$	50	A
I_{FSM}	Forward surge current	$t=10ms, 50HZ, sin, T_{jm}$	450	A
I^2t	I^2t value		840	A ² S
V_{ISO}	Isolation voltage	50Hz, R.M.S, $t=1min, I_{iso}:1mA(max)$	2000	V
T_j	Operating junction temperature		-40 to +150	°C
T_{jm}	Rated junction temperature		150	°C
T_{stg}	Storage temperature		-40 to +125	°C
M_d	Mounting torque M5		2	N·m
W_t	Weight		26	g

Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
I_{RRM}	Peak reverse repetitive current	$V_R=V_{RRM}$, sine half-wave, $T_j=25^{\circ}C$	5	μA
		$V_R=V_{RRM}$, sine half-wave, $T_j=150^{\circ}C$	3	mA
V_{FM}	Peak forward voltage	$I_{FM}=75A, T_j=25^{\circ}C$	1.3	V
$R_{th(j-c)}$	Thermal impedance (junction-case)	Single-sided heat dissipation, sine half-wave	1.1	°CW