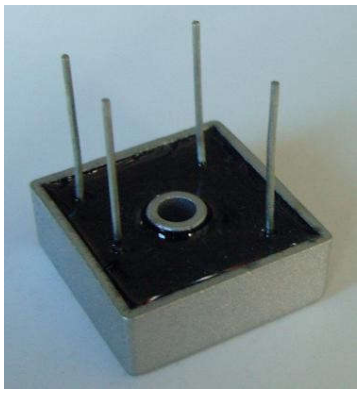
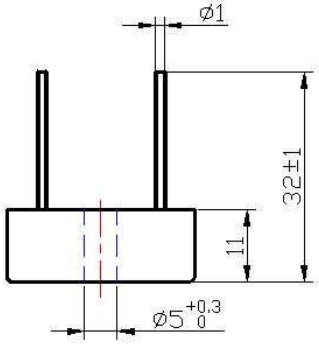
Hottech Semiconductor

KBPC2504W KBPC2510W



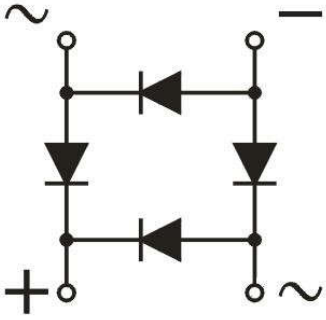


Feature

- 6.3mm standard pin
- Low forward voltage drop
- Isolation voltage 2500V～
- UL registered E304417

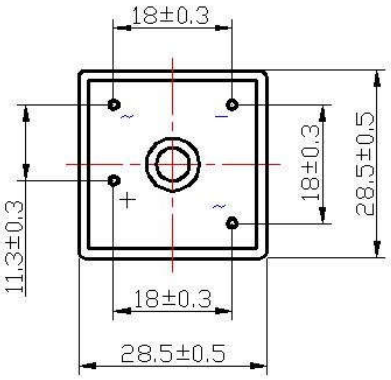
Application

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



Advantage

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



■ Maximum value

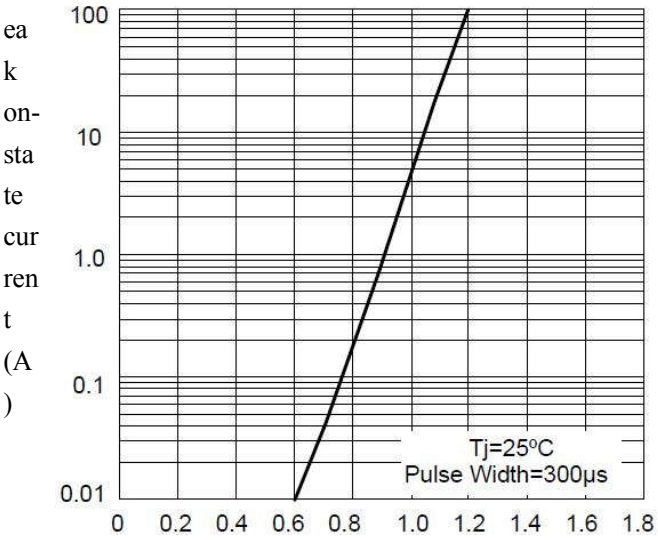
Symbol	Parameter	Rating				Unit
		KBPC2504W	KBPC2506W	KBPC2508W	KBPC2510W	
V_{RRM}	Peak reverse repetitive voltage	400	600	800	1000	V
V_{RSM}	Peak reverse non-repetitive voltage	500	700	900	1100	V

Symbol	Parameter	Test condition	Rating	Unit
$I_{F(AV)}$	Forward average current	180° sine half-wave 50HZ single-sided heat dissipation, T_C=55℃	35	A
I_{FSM}	Forward surge current	t=10ms,50HZ,sin,Tjm	400	A
I^2t	I^2t value		660	A^2S
V_{ISO}	Isolation voltage	AC one minute	2500	V
Tj	Operating junction temperature		-40 to +150	℃
Tjm	Rated junction temperature		150	℃
Tstg	Storage temperature		-40 to +125	℃
Md	Mounting torque M5		2	N·m
W_t	Weight		21	g

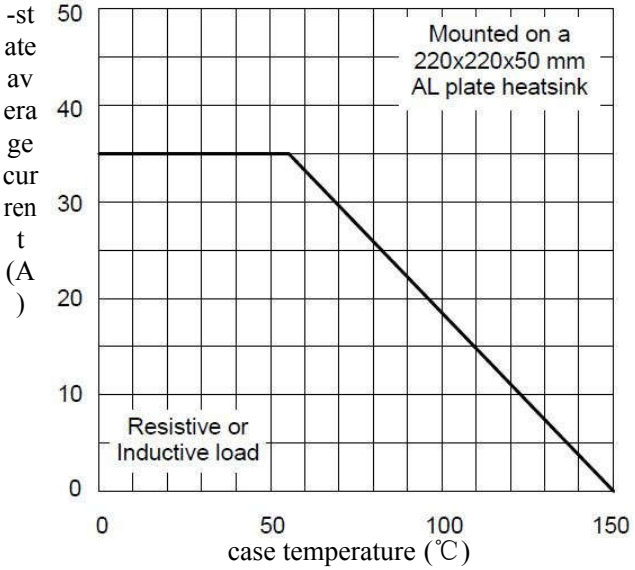
■ Electrical characteristics

Symbol	Parameter	Test condition	Rating	Unit
I_{RRM}	Peak reverse repetitive current	V_R=V_{RRM}, sine half-wave, Tj=25℃	5	μA
		V_R=V_{RRM}, sine half-wave, Tj=150℃	500	μA
V_{FM}	Peak forward voltage	I_{FM} =17.5A, Tj=25℃	1.1	V
Rth(j-c)	Thermal impedance（junction-case）	Single-sided heat dissipation, sine half-wave	1.4	℃/W

On-state current and voltage



Case temperature vs on-state average current



On-state surge current vs cycles