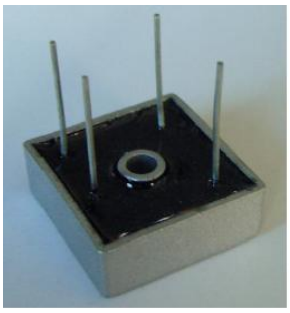
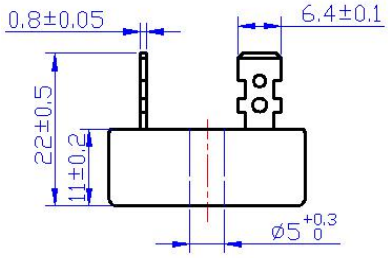
Single-phase Bridge Rectifer
KBPC1506W thru KBPC1510W

Feature

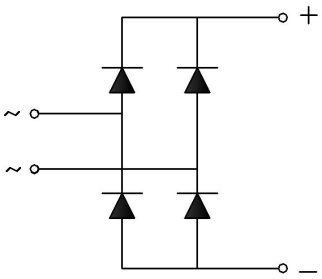
- ●Low forward voltage drop
- ●Isolation voltage 2000V～
- ●Small volume, light weight
- ●Low thermal resistance,
  high heat-conduction rate, low temperature rise
- ●UL registered E304417

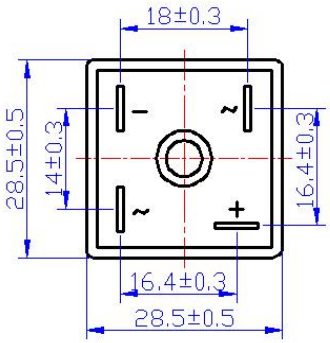




Application

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





■ Maximum value

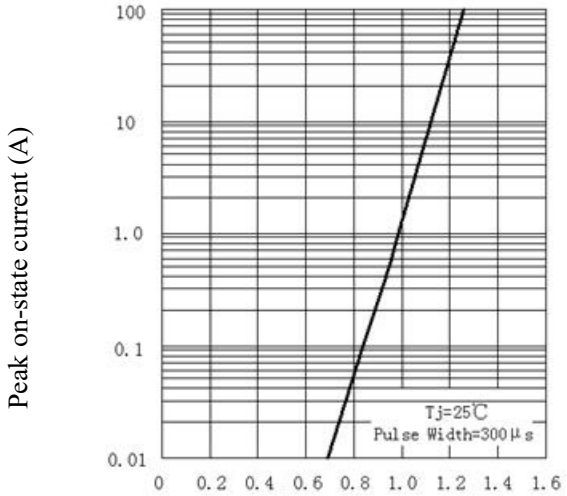
Symbol	Parameter	Rating			Unit
		KBPC			
		1506	1508	1510	
V_{RRM}	Peak reverse repetitive voltage	600	800	1000	V
V_{RSM}	Peak reverse non-repetitive voltage	700	900	1100	V

Symbol	Parameter	Test condition	Rating	Unit
$I_{F(AV)}$	Forward average current	T_C=55℃	15	A
I_{FSM}	Forward surge current	t=10ms,50Hz,sin,Tjm	180	A
I^2t	I^2t value		162	A^2S
V_{ISO}	Isolation voltage	50Hz，R.M.S，t=1min，I_{iso}:1mA(max)	2000	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		17	g

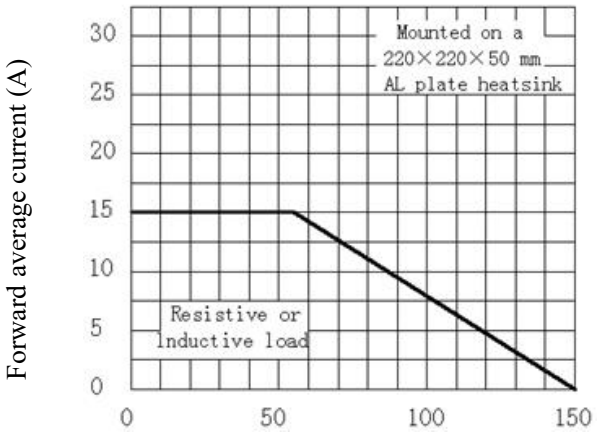
■ Electrical characteristics

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℃	3	mA
V_{FM}	Peak forward voltage	I_{FM}=7.5A, Tj=25℃	1.1	V
Rth(j-c)	Thermal impedance(junction-case)	Single-sided heat dissipation, sine half-wave	1.6	℃/W

On-state current and voltage



Case temperature vs on-state average current



On-state surge current vs cycles