

KBPC5006W thru KBPC5010W

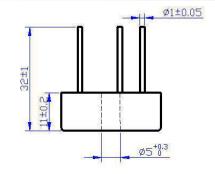
Features

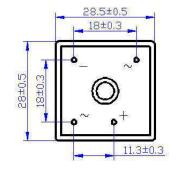
- Low forward pressure drop
- Insulation Voltage 2000V
- Small thermal resistance, high
- thermal conductivity, low
- temperature rise UL E304417

Application

- DC equipment voltage
- PWM Input rectifier for converter o
- Direct current motor







■ Maximum value

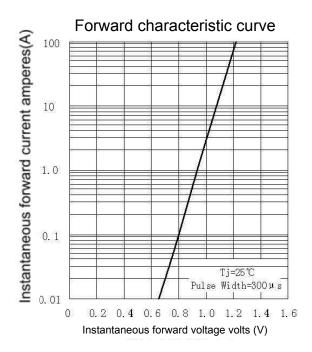
Symbo	Parameter	Rated value KBPC			unit
		V _{RRM}	Maximum repetitive peak reverse voltage	600	800
V _{RSM}	Maximum RMS bridge input voltage	700	900	1100	V

Symbo	Parameter	Test Condition	Rated value	unit
I _{F (AV)}	Maximum average forward rectified output current	180°Half sine wave 50Hz One-sided heat dissipation Tc=55°C	50	A
I _{FSM}	Peak forward surge current single sine-wave superimposed on rated load	t=10ms,50Hz,sin,Tjm	450	A
I ² t	Rating for fusing It		890	A ² S
V _{ISO}	Insulation Voltage	50Hz, R.M.S, t=1min, I _{iso} :1mA(max)	2000	V
Tj	Operating junction and storage temperature range		-40 to +150	$^{\circ}$
Tjm	Rated junction temperature		150	℃
Tstg	Storage temperature		-40 to +125	J
Md	Erection moment M5		2	N·m
W_{t}	Weight		17	g

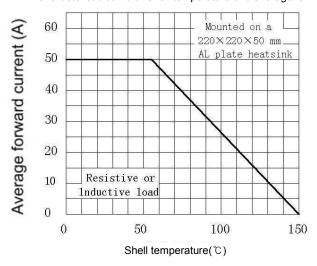
■ Flectrical characteristics

Symbo	Parameter	Test Condition	Maximum	unit
I_{RRM}	Repetitive peak reverse current	$V_R \!\!=\!\! V_{RRM}$, Half sine wave Tj=25 $^{\circ}\!$	5	μΑ
		$V_R \!\!=\!\! V_{RRM}$, Half sine wave Tj=150 $^\circ \!\!\! \text{C}$	3	mA
$V_{ ext{FM}}$	Forward peak voltage	I _F =25A, Tj=25°C	1.1	V
Rth(j-c)	Thermal impedance	One-sided heat dissipation Half sine wave	1.6	°C/W

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Characteristic curve of Shell temperature and average forward current



Characteristic curve of forward inrush current and cycle number

