KBPC1004 thru KBPC1010
Bridge Rectifiers

Features

- High surge current capability
- Low Power Loss, High Efficiency
- Low reverse leakage
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC
- UL Recognized File #E304417

Mechanical Date

- **Case:** KBPC (Metal Case with Faston Lugs)
- **Terminals:** Plated Leads, solderable per MIL-STD-202, Method 208
- **Mounting Position:** Through Hole for #10 Screw
- **Weight:** 21g

Applications

- DC power equipment of power supply
- PWM converter of input rectifier
- DC power supply equipment

Major Ratings and Characteristics

$I_{F(AV)}$	**10 A**
V_{RRM}	**400 V to 1000 V**
V_{ISO}	**2000V**
I_{FSM}	**250 A**
V_F	**1.0 V**
T_j **max.**	**125 °C**

Maximum Ratings & Thermal Characteristics

(T_A = 25 °C unless otherwise noted)

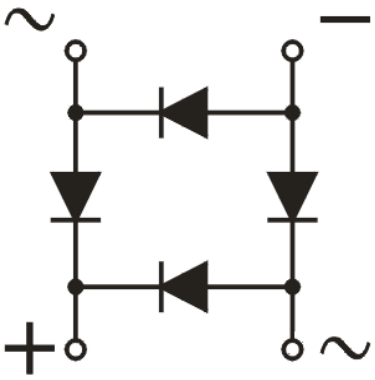
Items	Symbol	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	400	600	800	1000	V
Maximum non-repetitive peak reverse voltage	V_{RSM}	500	700	900	1100	V
RMS Isolation Voltage from case to leads	V_{ISO}	2000				V
Maximum average forward rectified current at T_C=55℃ and single phase half-wave 50HZ	$I_{F(AV)}$	10				A
Peak forward surge current 10 ms single half sine-wave superimposed on rated load	I_{FSM}	250				A
Rating for Fusing	I^2t	259				A^2S
Typical thermal resistance per leg(1)	$R_{\theta JC}$	1.4				℃/ W
Installation moment	Md	2				N•m
Operating junction temperature range	T_J	–40 to +125				℃
Storage temperature range	T_{STG}	–40 to +125				℃

Note 1: Thermal resistance from junction to case per leg.

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Items	Test conditions		Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage	I_F=5A		V_F	-	-	1.0	V
Reverse current	V_R=V_{DC}	T_j=25℃ T_j=100℃	I_R	-	-	10 500	μA

Circuit Configuration



Package Outline