



KBPC60005 THRU KBPC6010

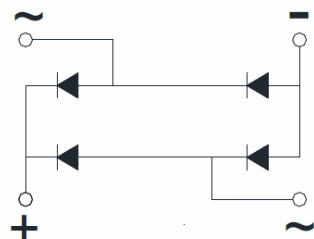
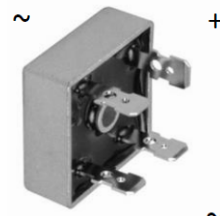
BRIDGE RECTIFIERS

FEATURES

- Universal 3-way terminals: snap-on, wire wraparound, or PCB mounting
- Glass Passivated Chip Junction
- Easy to pick and place
- High forward surge capability
- Low thermal resistance
- Solder dip 275 °C max.7 s, per JESD 22-B106

Mechanical Data

- Case : KBPC
- Terminals : Solder plated, solderable per J-STD-002 and JESD22-B102



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

CHARACTERISTICS	Symbols	KBPC60005	KBPC6001	KBPC6002	KBPC6004	KBPC6006	KBPC6008	KBPC6010	UNIT
Device marking code		KBPC60005	KBPC6001	KBPC6002	KBPC6004	KBPC6006	KBPC6008	KBPC6010	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @60Hz sine wave, R-load, T _c =55°C	I _(AV)	60							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I _{FSM}	500							A
I ² T Rating for Fusing (t<8.3ms)	I ² T	1037.5							A ² S
Maximum Forward Voltage at 30A	V _F	1.1							V
Maximum DC Reverse Current T _A =25°C	I _R	5.0							μA
at Rated DC Blocking Voltage T _A =125°C		100							μA
Typical Junction Capacitance (V _R =4.0V, f=1MHZ)	C _J	152							pF
Typical Thermal Resistance (Note)	R _{θJC}	1.3							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C
Dielectric strength @ Terminals to case, AC 1 minute	V _{dis}	2.5							KV
Mounting torque@Recommend torque: 5kgcm	Tor	8							kg·cm

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

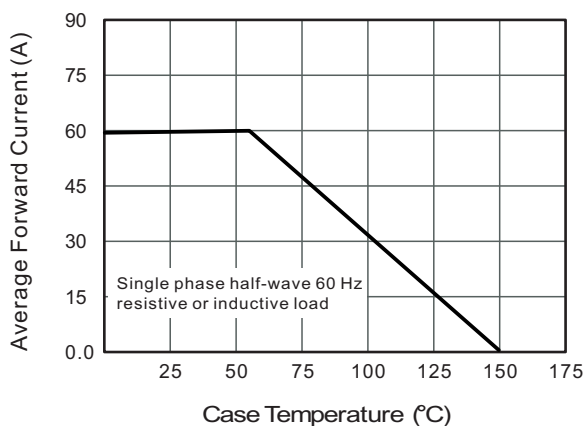


Fig.2 Typical Reverse Characteristics

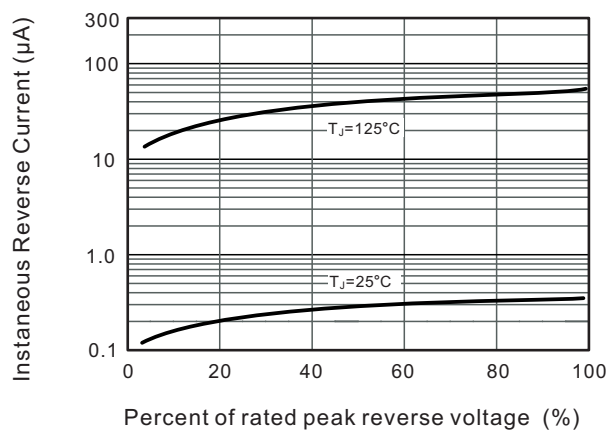


Fig.3 Typical Forward Characteristic

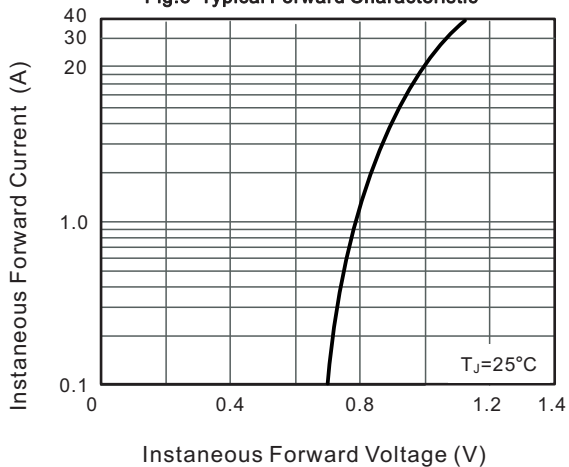
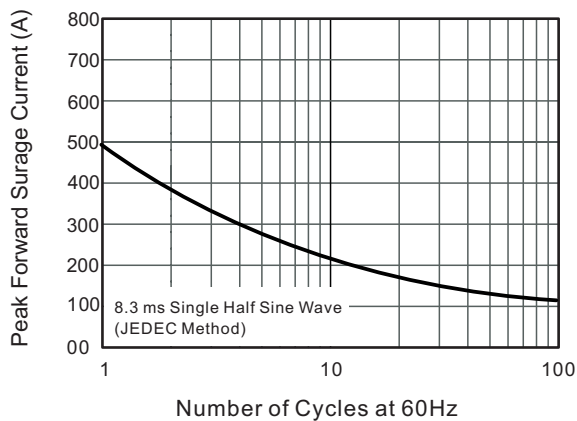


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

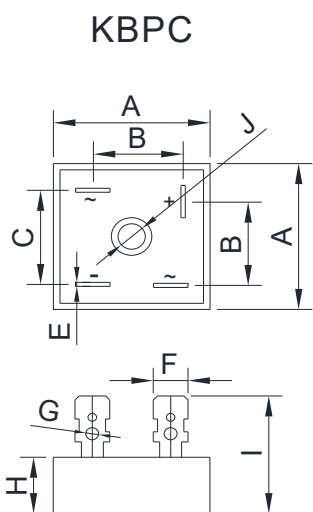




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BRIDGE RECTIFIERS

■ Outline Dimensions



Dimensions in inches and millimeters

KBPC		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.3	2.5
H	10.8	11.2
I	19	/
J	5.0	5.5