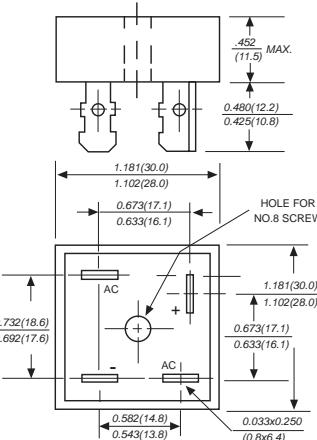


Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E157705

Mechanical Data

- Case: Metal Case with Electrically Isolated Epoxy
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: KBPC 31.6 grams (approx.)
- Marking: Type Number



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics $\text{@T}_A=25^\circ\text{C}$ unless otherwise specified

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

Characteristics	Symbol	-00	-01	-02	-04	-06	-08	-10	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectifier Output Current $\text{@T}_C = 60^\circ\text{C}$	KBPC15 KBPC25 KBPC35	I _O			15	25	35		A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	KBPC15 KBPC25 KBPC35	I _{FSM}			300	400	400		A
Forward Voltage Drop (per element)	KBPC15 @ I _F = 7.5A KBPC25 @ I _F = 12.5A KBPC35 @ I _F = 17.5A	V _{FM}			1.2				V
Peark Reverse Current At Rated DC Blocking Voltage	@T _C = 25°C @T _C = 125°C	I _{RM}			10	1.0			µA mA
I ² t Rating for Fusing (t < 8.3ms) (Note 1)	KBPC15 KBPC25 KBPC35	I ² t			373	373	664		A ² s

KBPC15, 25, 35 SERIES

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

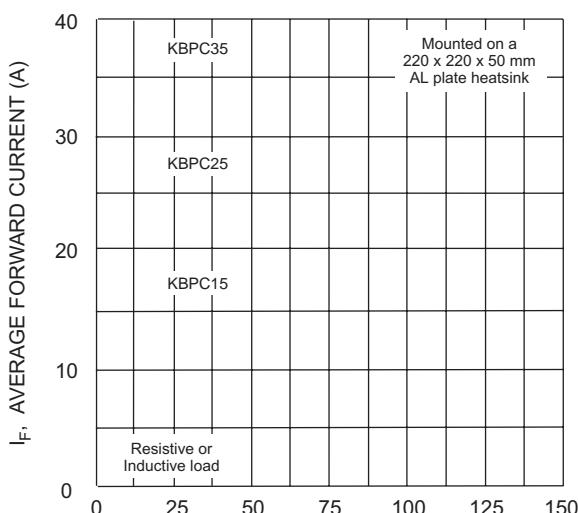
Typical Junction Capacitance (per element) (Note 2)	C_J	300	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3)	$R_{\theta JC}$	6.3 3.8 2.7	K/W
RMS Isolation Voltage from Case to Lead	V_{iso}	2500	V
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

* Glass passivated forms are available upon request.

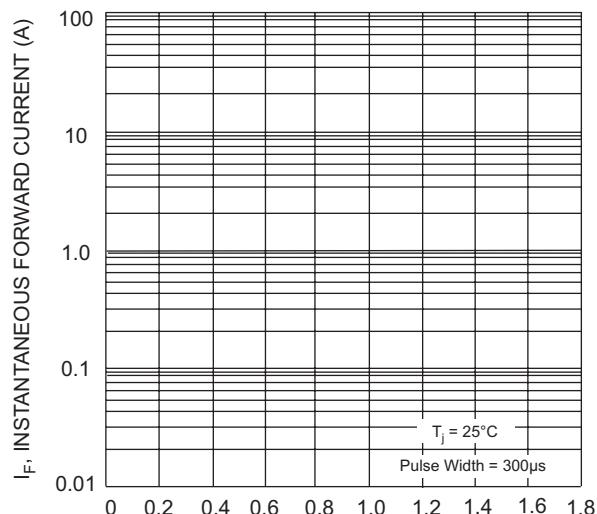
Note: 1. Measured at non-repetitive, for $t > 1\text{ms}$ and $< 8.3\text{ms}$.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance junction to case mounted on heatsink.



T_C , CASE TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics (per element)

KBPC15, 25, 35 SERIES

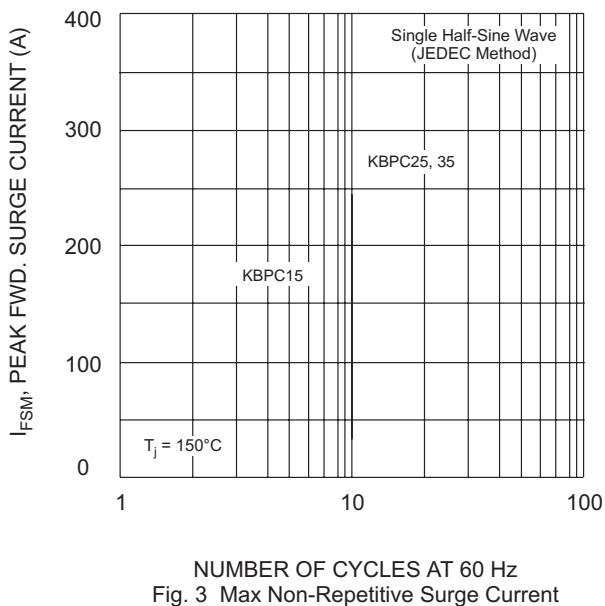


Fig. 3 Max Non-Repetitive Surge Current

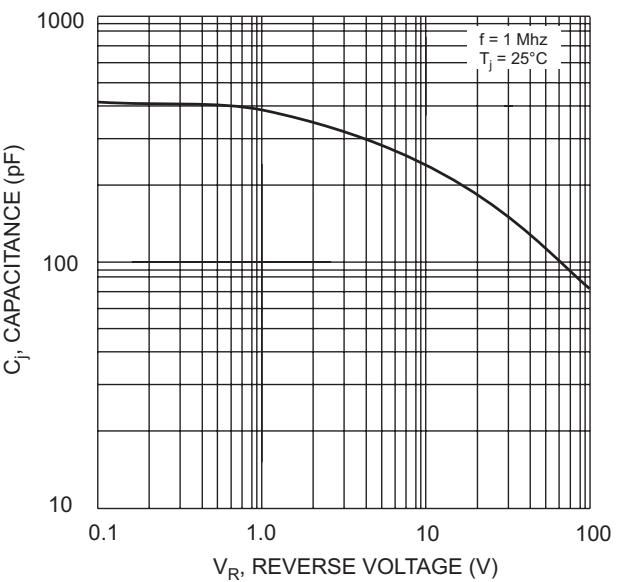


Fig. 4 Typical Junction Capacitance (per element)

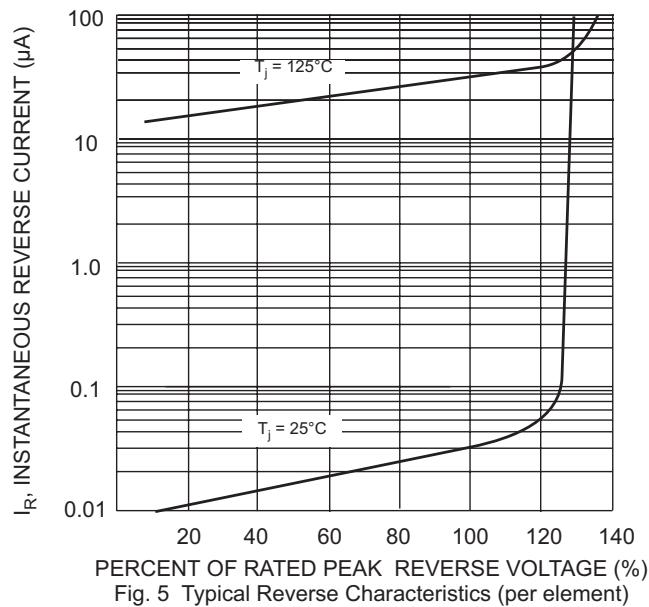


Fig. 5 Typical Reverse Characteristics (per element)