

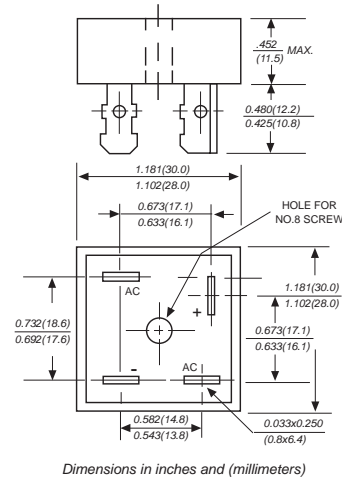
KBPC40, 50 SERIES

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



Maximum Ratings and Electrical Characteristics @T_A=25°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	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectifier Output Current @T _C = 55°C	I _O				40	50			A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	I _{FSM}				400	400			A
Forward Voltage Drop (per element)	V _{FM}				1.2				V
Peak Reverse Current At Rated DC Blocking Voltage	I _{RM}				10	1.0			μA mA

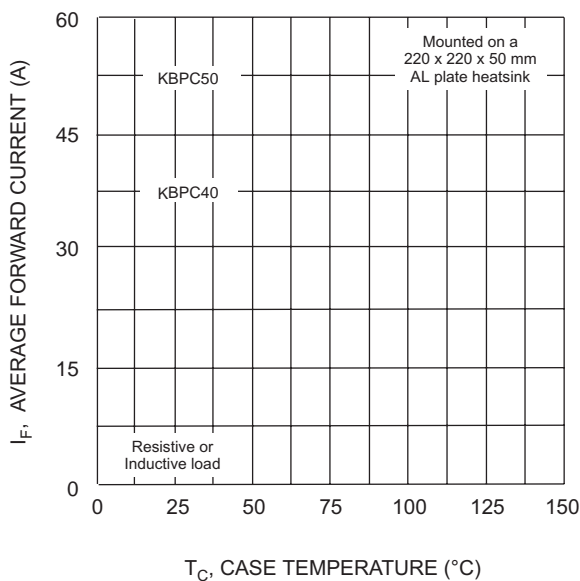
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Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

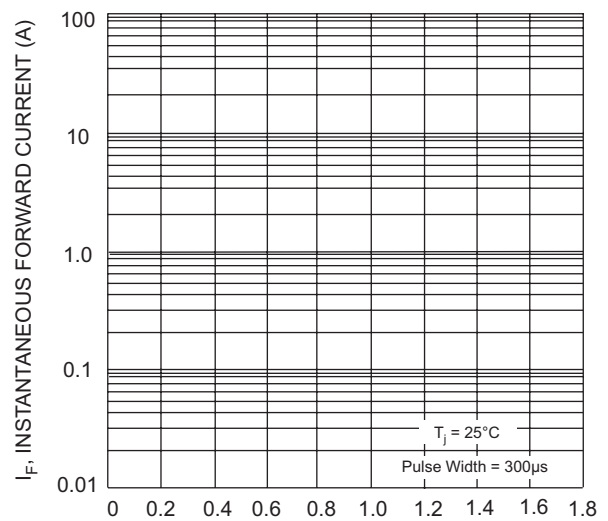
Typical Junction Capacitance (per element) (Note 1)	C _j	300	pF
Typical Thermal Resistance Junction to Case (per element) (Note 2)	R _{θJC}	1.5	K/W
RMS Isolation Voltage from Case to Lead	V _{ISO}	2500	V
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

* Glass passivated forms are available upon request.

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. 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)

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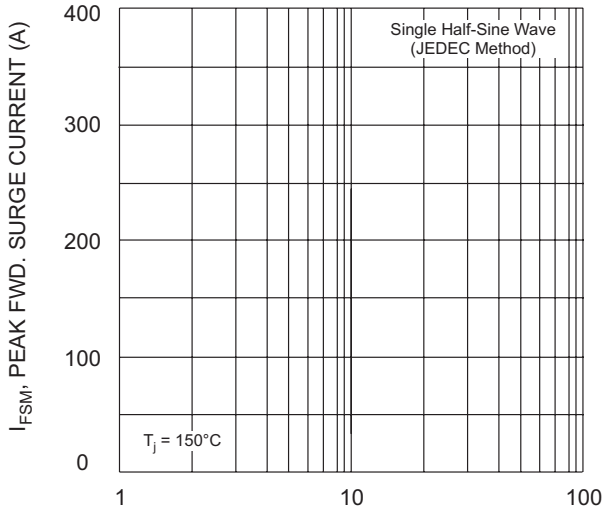


Fig. 3 Max Non-Repetitive Surge Current

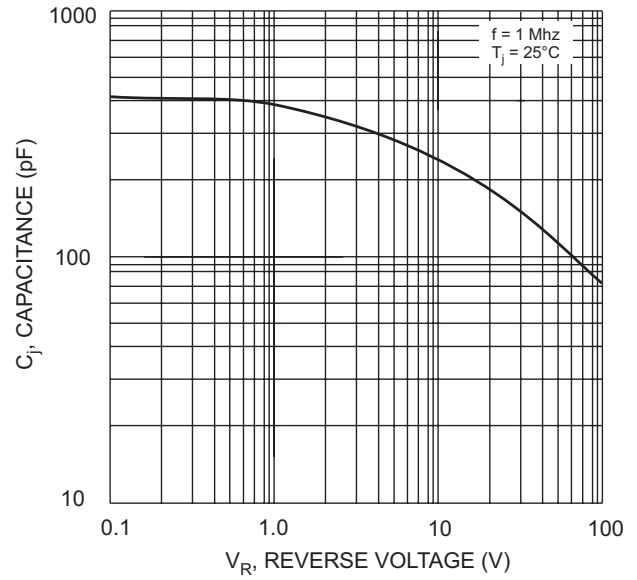


Fig. 4 Typical Junction Capacitance (per element)

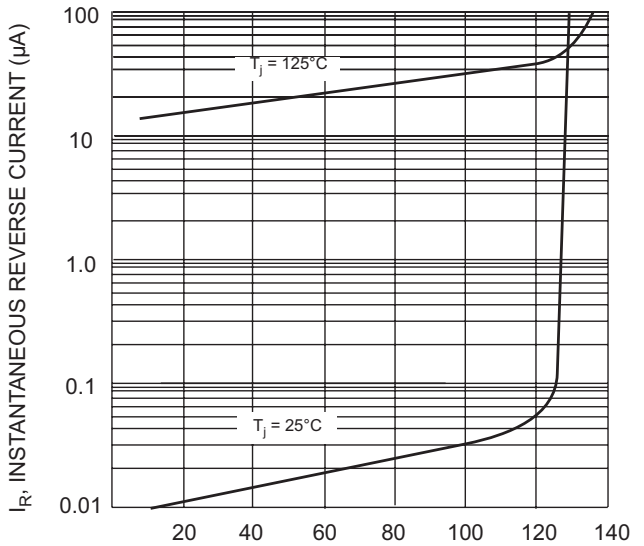


Fig. 5 Typical Reverse Characteristics (per element)