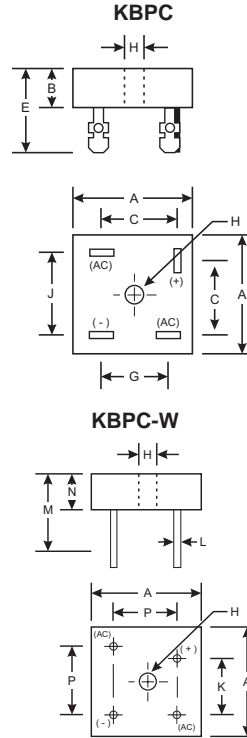


### Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Surge Overload Rating to 400A Peak
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 1500V
- UL Listed: Recognized Component Index, File Number E95060

### Mechanical Data

- Case: High Conductivity Metal
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Mounting Torque: 8.0 Inch-pounds Maximum
- Weight: KBPC 31.6 grams (approx)
- KBPC-W 28.5 grams (approx)
- Mounting Position: Any
- Marking: Type Number



KBPC / KBPC-W		
Dim	Min	Max
A	28.40	28.70
B	10.97	11.23
C	15.50	17.60
E	22.86	25.40
G	13.30	15.30
H	Hole for #10 screw	
	4.85 $\varnothing$	5.59 $\varnothing$
J	17.10	19.10
K	10.40	12.40
L	0.97 $\varnothing$	1.07 $\varnothing$
M	30.50	—
N	10.97	11.23
P	17.10	19.10
All Dimensions in mm		

"W" Suffix Designates Wire Leads  
No Suffix Designates Fast-on Terminals

### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	KBPC25005/W	KBPC2501/W	KBPC2502/W	KBPC2504/W	KBPC2506/W	KBPC2508/W	KBPC2510/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current @ T <sub>C</sub> = 55°C	I <sub>O</sub>	25							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	400							A
Forward Voltage (per element) @ I <sub>F</sub> = 12.5A	V <sub>FM</sub>	1.2							V
Peak Reverse Current @ T <sub>C</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>C</sub> = 125°C	I <sub>RM</sub>	10 1.0							$\mu$ A mA
I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 3)	I <sup>2</sup> t	373							A <sup>2</sup> s
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	300							pF
Typical Thermal Resistance Junction to Case	R <sub><math>\theta</math>JC</sub>	3.8							K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C

- Notes:
1. Thermal resistance junction to case mounted on heatsink.
  2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
  3. Measured at non-repetitive, for t > 1.0ms and < 8.3ms.

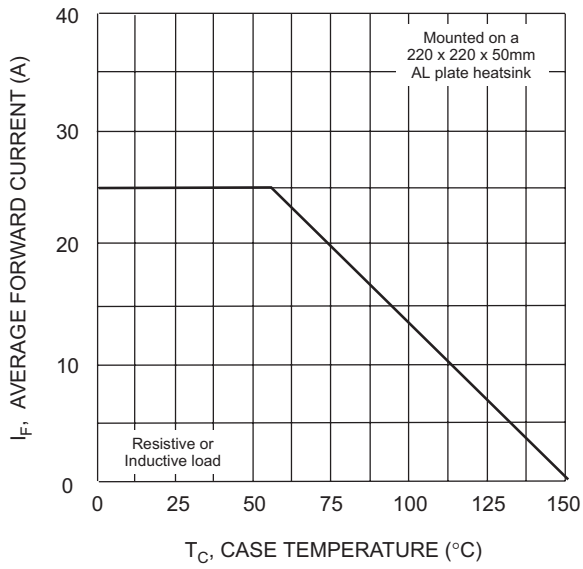


Fig. 1 Forward Current Derating Curve.

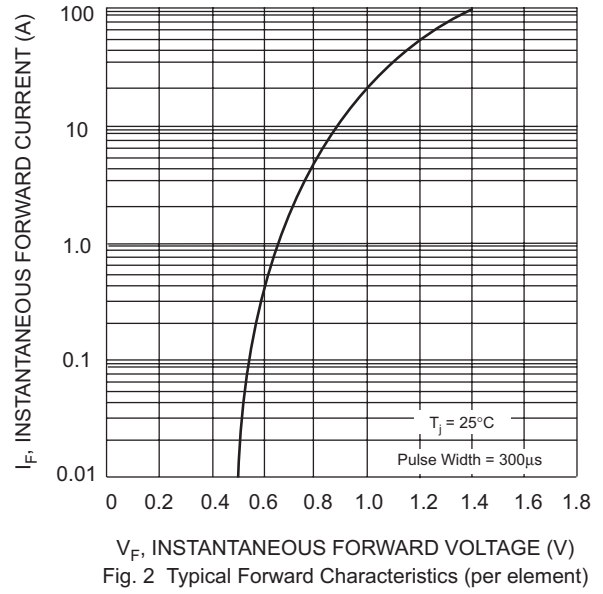


Fig. 2 Typical Forward Characteristics (per element)

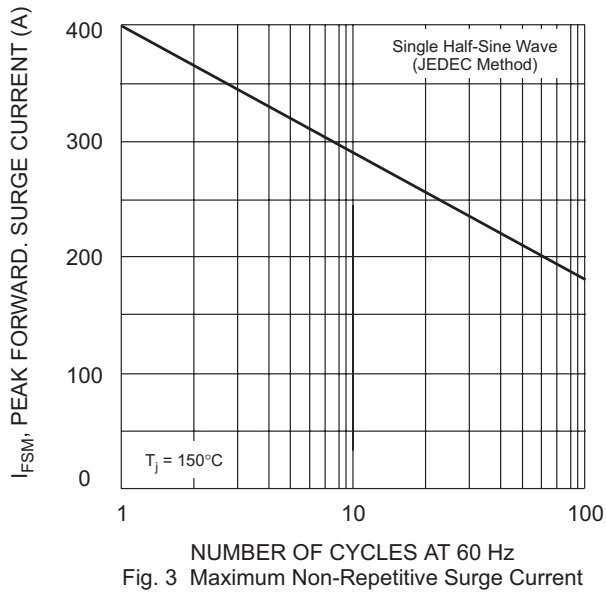


Fig. 3 Maximum Non-Repetitive Surge Current

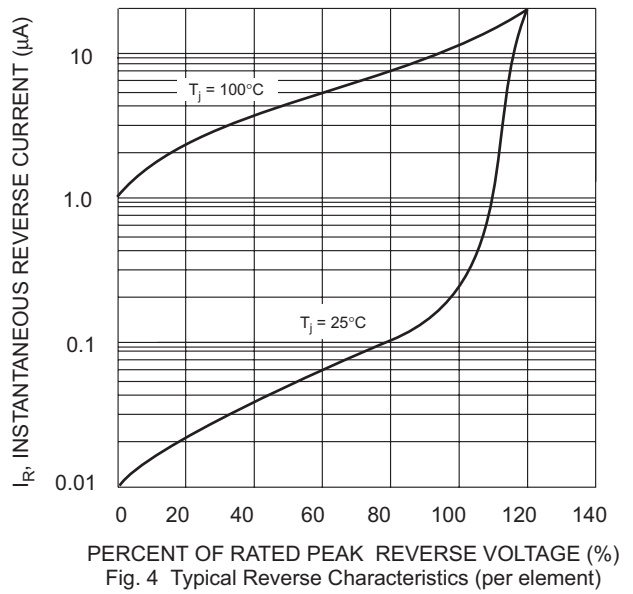


Fig. 4 Typical Reverse Characteristics (per element)