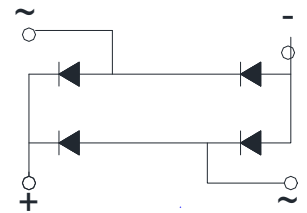
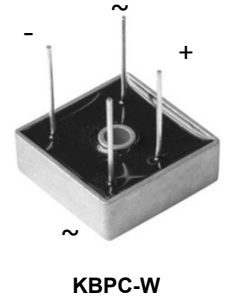
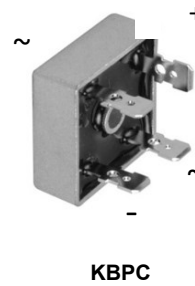


## Features

- Surge overload rating - 200~400A peak
- High surge current capability
- Low thermal resistance
- Low forward voltage drop
- Mounting position: Any
- Electrically isolated base - 1800V
- Solderable 0.25" FASTON terminals
- Solder dip 275 °C max. 7 s, per JESD 22-B106
- Terminals: Tin plated leads,  
 Solderable per J-STD-002 and JESD22-B102,  
 Suffix letter "W" added to indicate wire leads(e.g. KBPC1010W)



**Schematic Diagram**

## Maximum Ratings and Electrical Characteristics

$T_A=25^{\circ}\text{C}$  Unless otherwise specified

Parameter	Symbol	KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	Unit
		KBPC 10005W	KBPC 1001W	KBPC 1002W	KBPC 1004W	KBPC 1006W	KBPC 1008W	KBPC 1010W	
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum Instantaneous Forward Voltage Drop per Diode ( $I_{FM}=5A$ )	$V_{FM}$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode ( $V_{RM}=V_{RRM}$ )	$I_{RRM}$	10							$\mu A$
Average Rectified Output Current @60Hz Sine Wave, R-load, With Heatsink, $T_c=55^{\circ}\text{C}$	$I_O$	10							A
Surge(Non-repetitive) Forward Current @60Hz Half- sine Wave, 1 cycle, $T_A=25^{\circ}\text{C}$	$I_{FSM}$	220							A
Current Squared Time @ $1\text{ms}\leq t\leq 8.3\text{ms}$ $T_J=25^{\circ}\text{C}$ , Rating of Per Diode	$I^2t$	200							$A^2S$
Storage Temperature	$T_{STG}$	-55 to +150							$^{\circ}\text{C}$
Junction Temperature	$T_J$	-55 to +150							$^{\circ}\text{C}$
Dielectric Strength, Terminals to Case, AC 1 minute	$V_{dis}$	2.6							KV
Thermal Resistance, Between Junction and Case, With Heatsink	$R_{\theta J-C}$	2.2							$^{\circ}\text{C}/\text{W}$

**Ratings and Characteristics Curves**

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

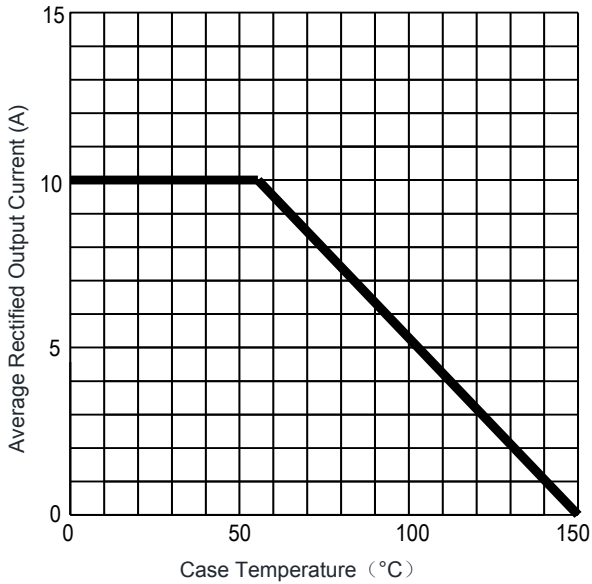


Figure 1.  $I_o$ - $T_c$  Curve

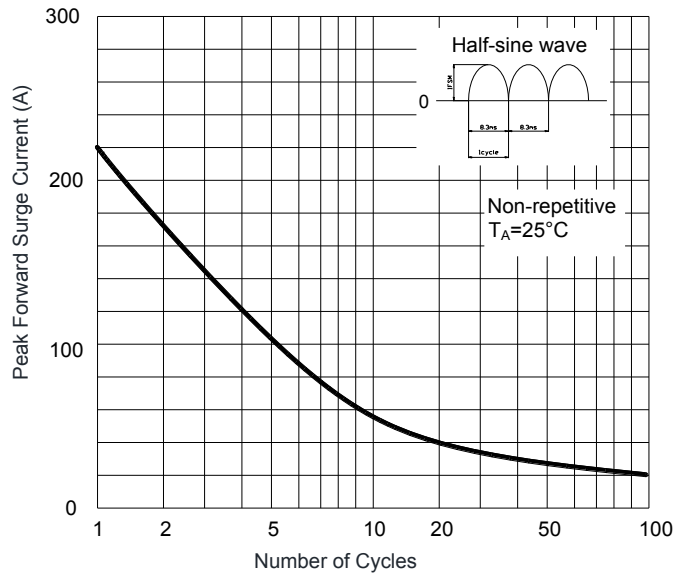


Figure 2. Surge Forward Current Capability

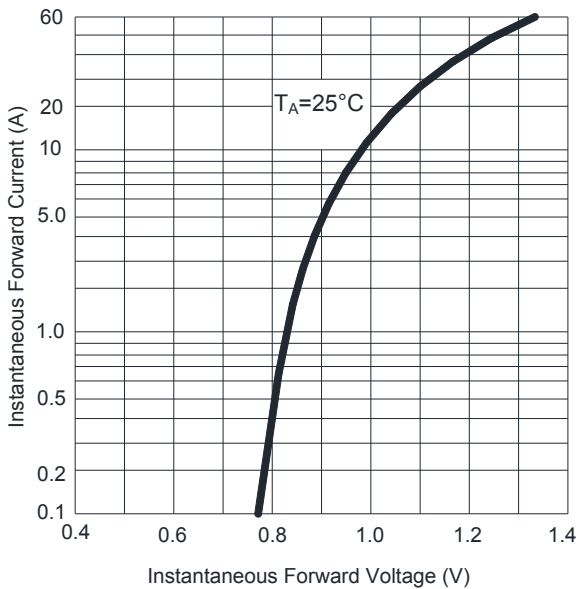


Figure 3. Instantaneous Forward Voltage

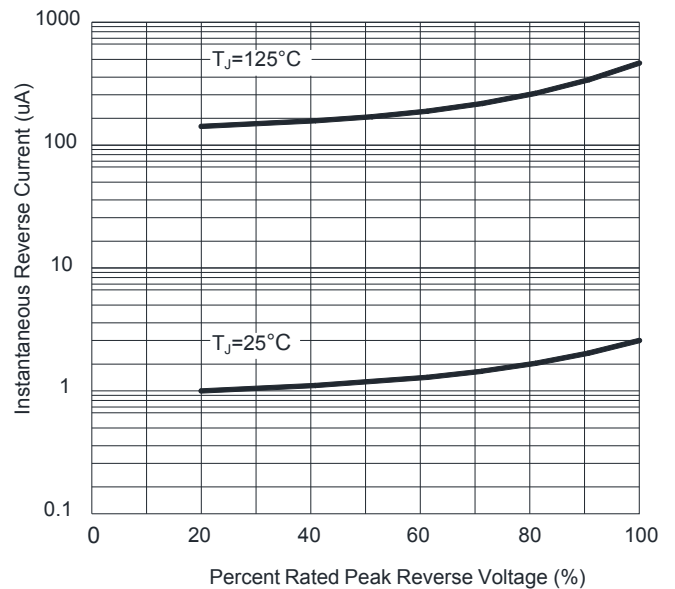
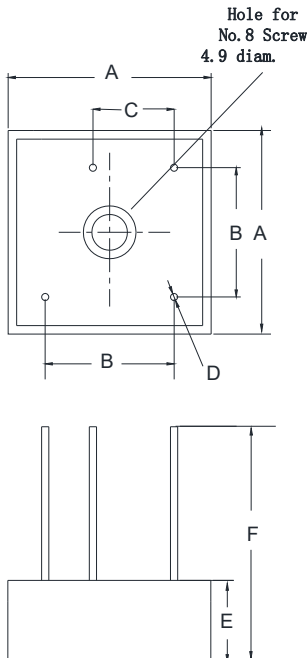


Figure 4. Typical Reverse Characteristics

**Package Outline Dimensions**

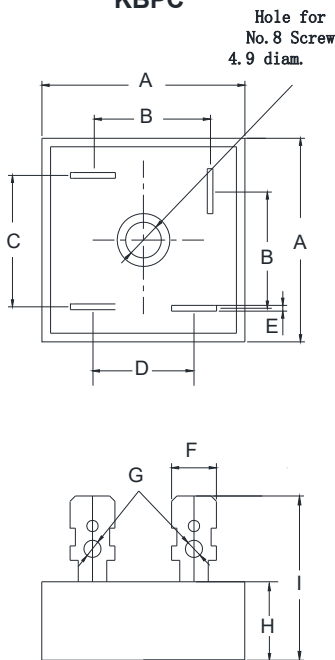
**KBPC-W**



KBPC-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	10.8	11.2
F	30	

Dimensions in millimeters

**KBPC**



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	2.6
H	10.8	11.2
I	19	