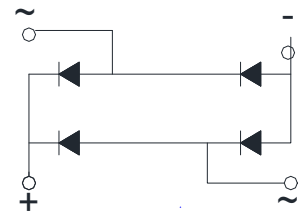
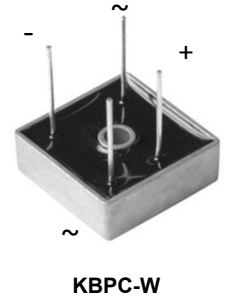
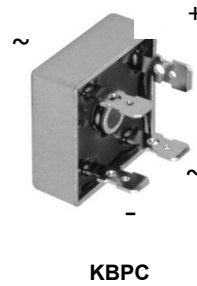


# KBPC35 Series

Glass Passivated Single-Phase Bridge Rectifiers  
 Voltage Range 50 to 1000V Forward Current 35A

## 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. KBPC3510W)



**Schematic Diagram**

## Maximum Ratings and Electrical Characteristics

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

Parameter	Symbol	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	KBPC	Unit
		35005	3501	3502	3504	3506	3508	3510	
		KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	
Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum Instantaneous Forward Voltage Drop per Diode ( $I_{FM}=17.5\text{A}$ )	$V_{FM}$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode ( $V_{RM}=V_{RRM}$ )	$I_{RRM}$	10							$\mu\text{A}$
Average Rectified Output Current @60Hz Sine Wave, R-load, With Heatsink, $T_c=55^{\circ}\text{C}$	$I_O$	35							A
Surge(Non-repetitive) Forward Current @60Hz Half- sine Wave, 1 cycle, $T_A=25^{\circ}\text{C}$	$I_{FSM}$	400							A
Current Squared Time @ $1\text{ms}\leq t\leq 8.3\text{ms}$ $T_J=25^{\circ}\text{C}$ , Rating of Per Diode	$I^2t$	660							$\text{A}^2\text{S}$
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	$V_{dis}$	2.5							KV
Thermal Resistance, Between Junction and Case, With Heatsink	$R_{\theta J-C}$	1.6							$^{\circ}\text{C}/\text{W}$

**Ratings and Characteristics Curves**

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

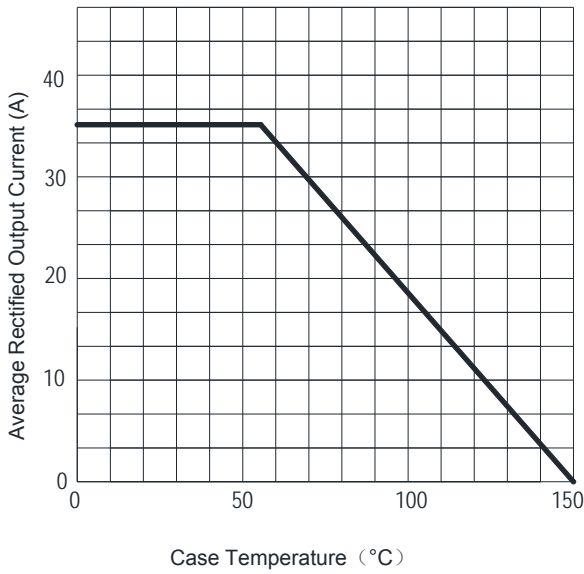


Figure 1.  $I_o$ - $T_c$  Curve

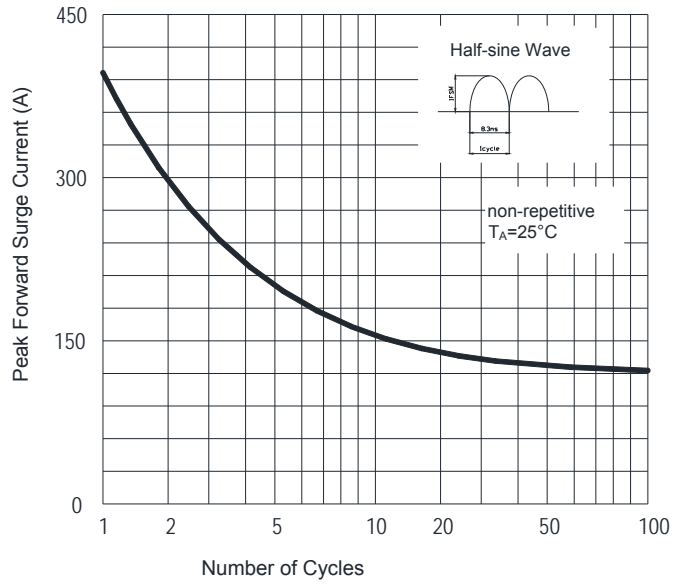


Figure 2. Surge Forward Current Capability

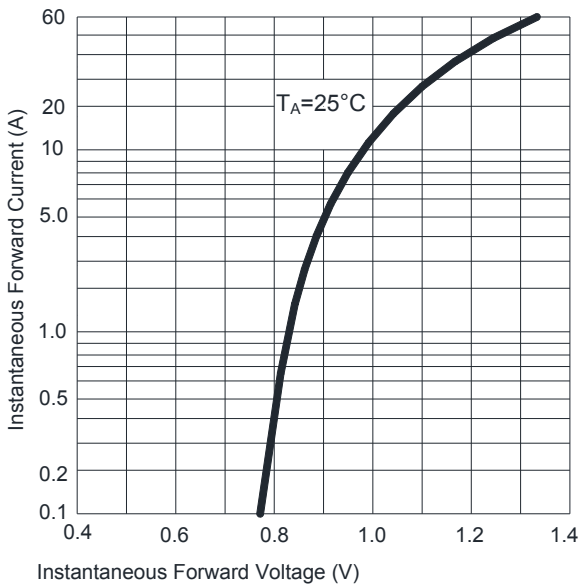


Figure 3. Instantaneous Forward Voltage

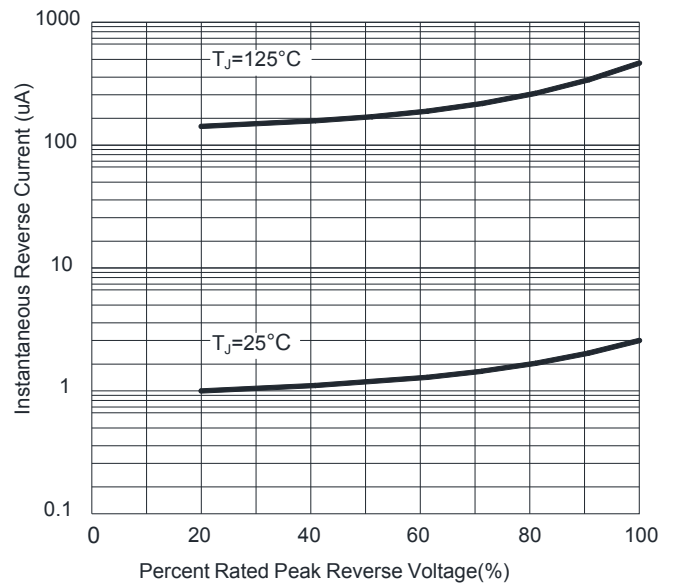
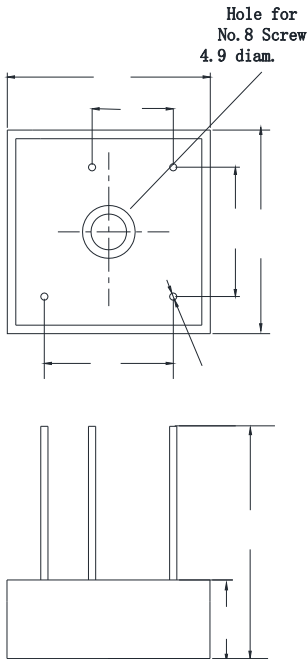


Figure 4. Typical Reverse Characteristics

**Package Outline Dimensions**

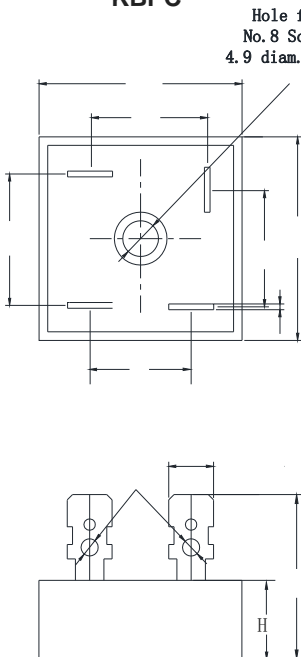
**KBPC-W**



KBPC-W		
Dim	Min	Max
A	28 " 2	28 " 8
B	1 + " 1	1 - " 1
C	10 " 4	12 " 4
D	0 " - 5	1 " 05
E	10 " 8	11 " 2
F	' 0	

Dimensions in millimeters

**KBPC**



KBPC		
Dim	Min	Max
A	28 " 2	28 " 8
B	15 " ' 1	1 + " ' 1
C	1 + " 1	1 - " 1
D	1 ' " 2	15 " 2
E	0 " + 5	0 " 85
F	6 " 2	6 " 4
G	2 3	

Dimensions in millimeters