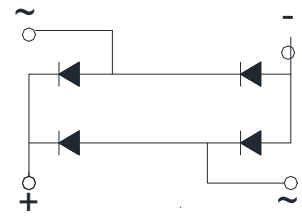
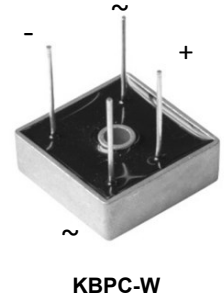
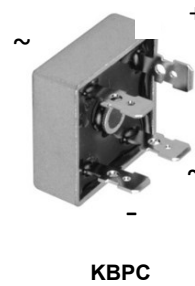


KBPC25 Series

Glass Passivated Single-Phase Bridge Rectifiers
 Voltage Range 50 to 1000V Forward Current 25A

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. KBPC2510W)



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
		25005	2501	2502	2504	2506	2508	2510	
		KBPC 25005W	KBPC 2501W	KBPC 2502W	KBPC 2504W	KBPC 2506W	KBPC 2508W	KBPC 2510W	
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum Instantaneous Forward Voltage Drop per Diode ($I_{FM}=12.5A$)	V_{FM}	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode ($V_{RM}=V_{RRM}$)	I_{RRM}	10							μA
Average Rectified Output Current @60Hz Sine Wave, R-load, With Heatsink, $T_c=55^{\circ}\text{C}$	I_o	25							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							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}	2.5							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)

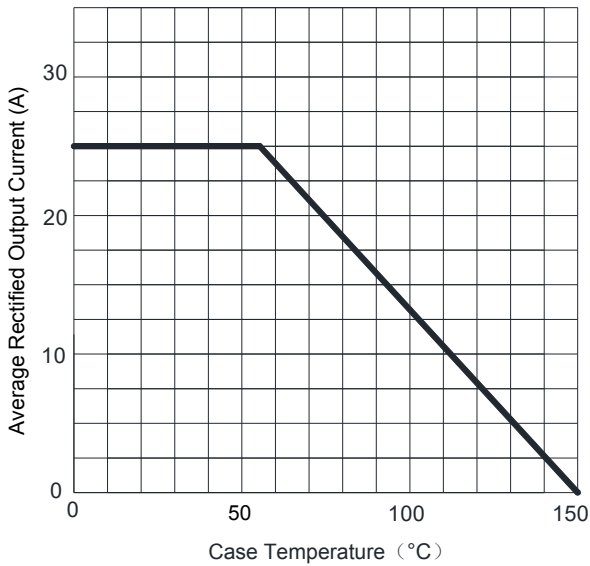


Figure 1. I_o - T_c Curve

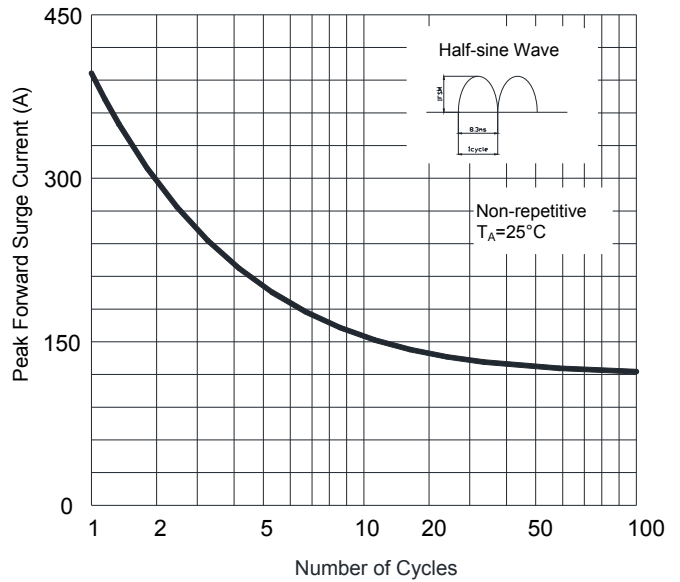


Figure 2. Surge Forward Current Capability

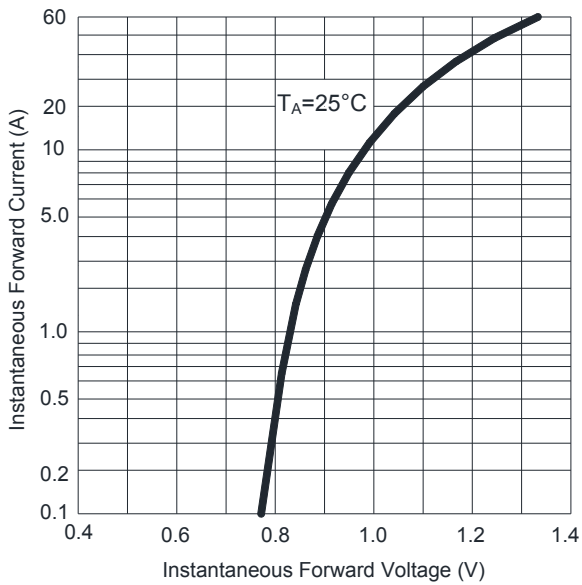


Figure 3. Instantaneous Forward Voltage

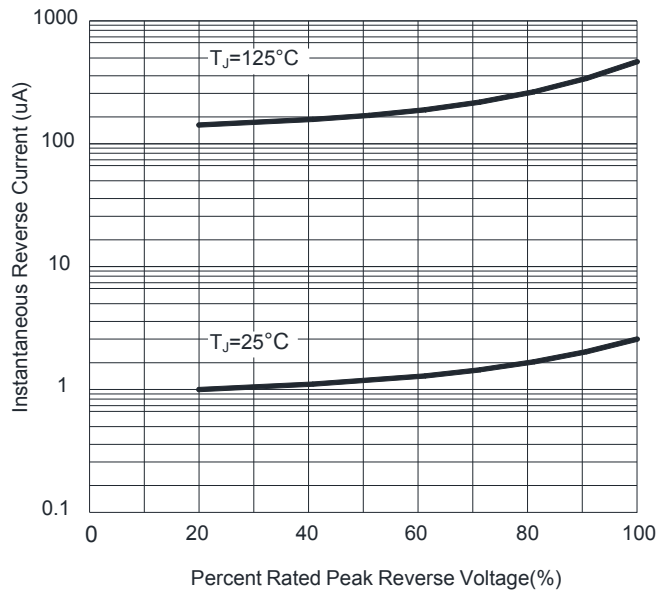
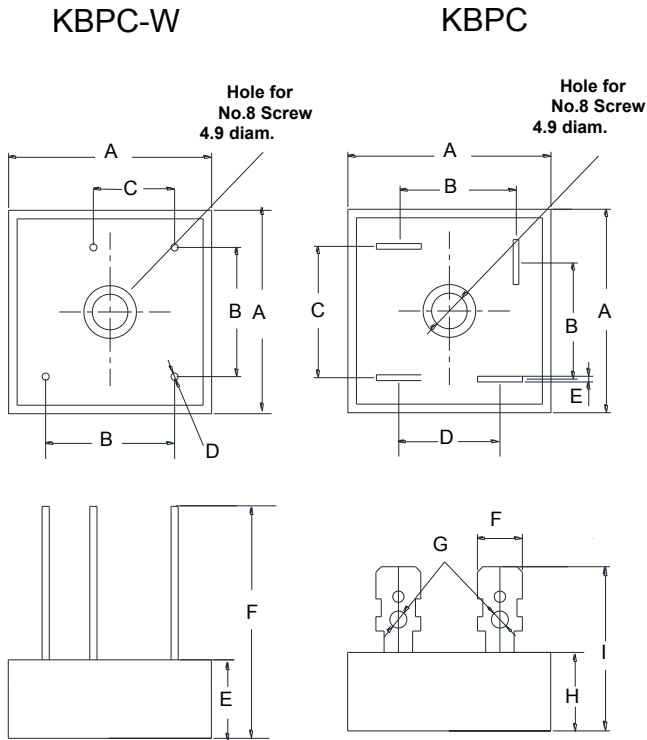


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions



Dimensions in millimeters

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	7.6	8.2
F	30	

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	2.5
H	7.6	8.2
I	19	