

## Bridge Rectifiers

### Features

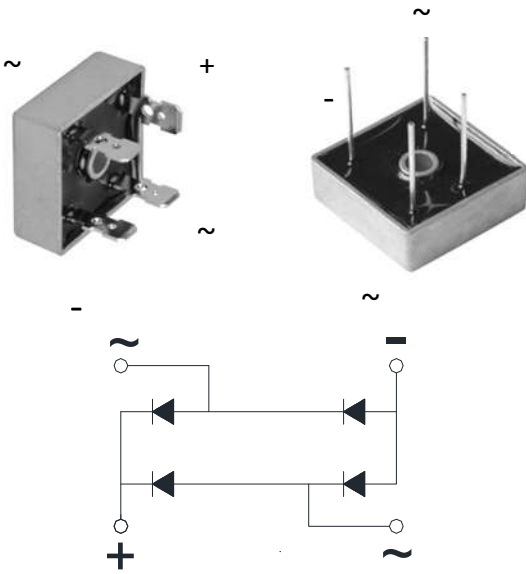
- UL recognition file number E230084
- Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

### Mechanical Data

- **Package:** KBPC,KBPC-W  
Molding compound meets UL 94 V-0 flammability rating,RoHS- compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102  
Suffix letter "W" added to indicate wire leads(e.g. KBPC3510W)



### ■Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBPC35 005	KBPC35 01	KBPC35 02	KBPC35 04	KBPC35 06	KBPC35 08	KBPC35 10
Device marking code			KBPC35005	KBPC3501	KBPC3502	KBPC3504	KBPC3506	KBPC3508	KBPC3510
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink T <sub>c</sub> =55°C	I <sub>O</sub>	A	35						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	400						
Current Squared Time @1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	660						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

### ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBPC35 005	KBPC35 01	KBPC35 02	KBPC35 04	KBPC35 06	KBPC35 08	KBPC35 10
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =17.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =VRRM	10						

### ■Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBPC35 005	KBPC35 01	KBPC35 02	KBPC35 04	KBPC35 06	KBPC35 08	KBPC35 10
Thermal Resistance Between junction and case, With heatsink	R <sub>θ J-C</sub>	°C/W	1.6						



# KBPC35005(W) THRU KBPC3510(W)

## Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBPC35005~KBPC3510	A1	Approximate 24.5	50	50	500	Paper Box
KBPC35005W~KBPC3510W	A1	Approximate 22.5	50	50	500	Paper Box

## Characteristics (Typical)

FIG1:  $I_o$ - $T_c$  Curve

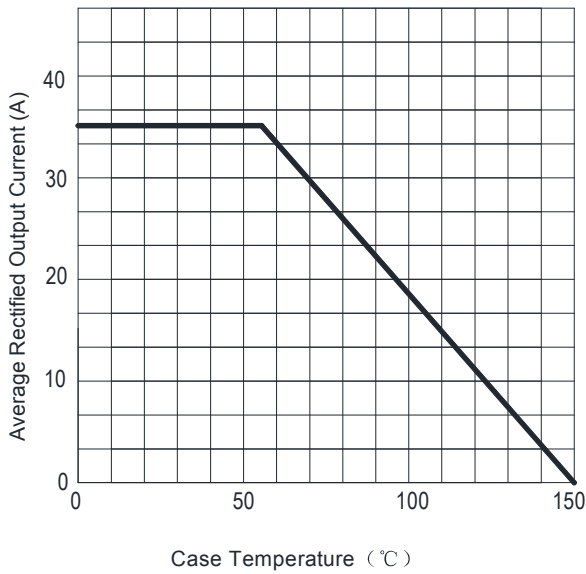


FIG2: Surge Forward Current Capability

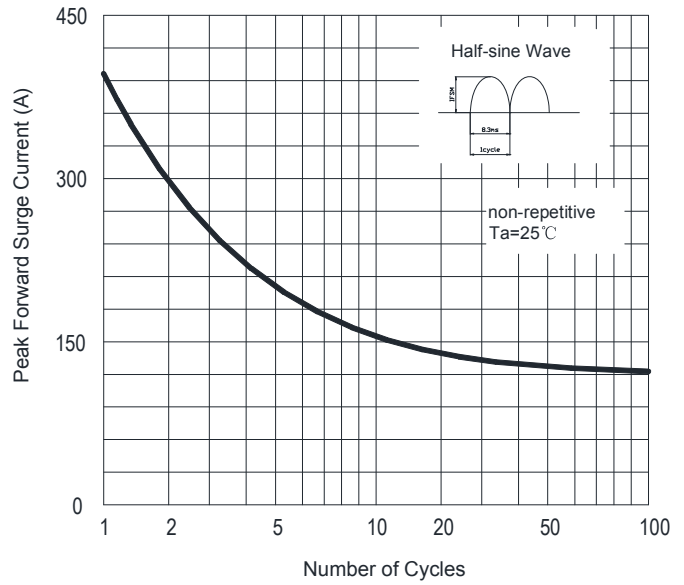


FIG3: Instantaneous Forward Voltage

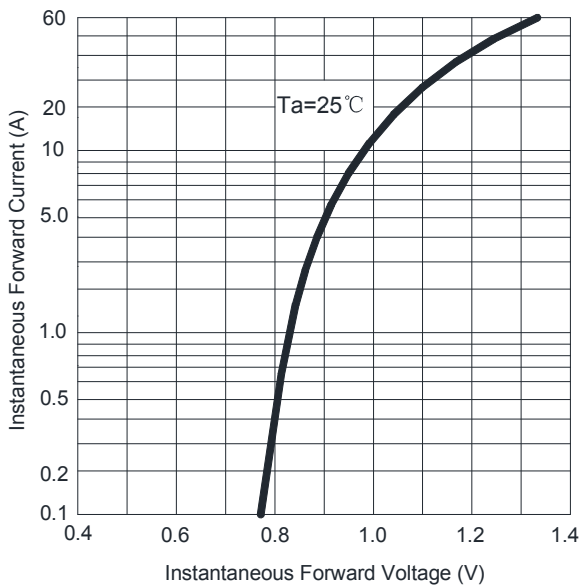
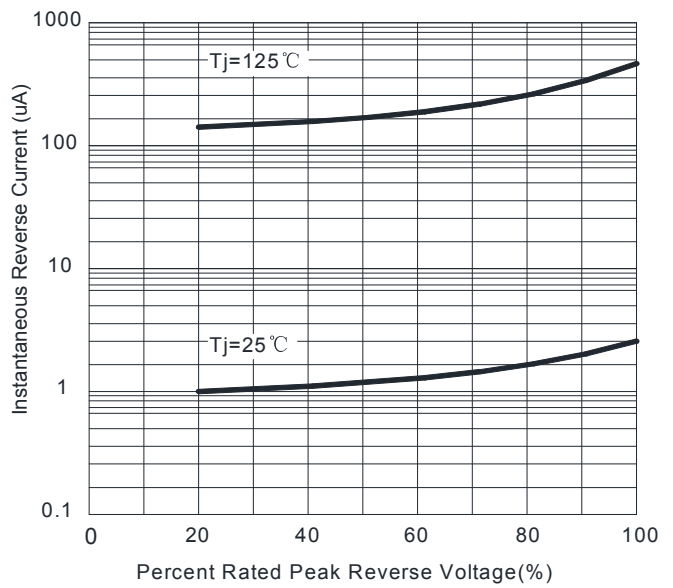


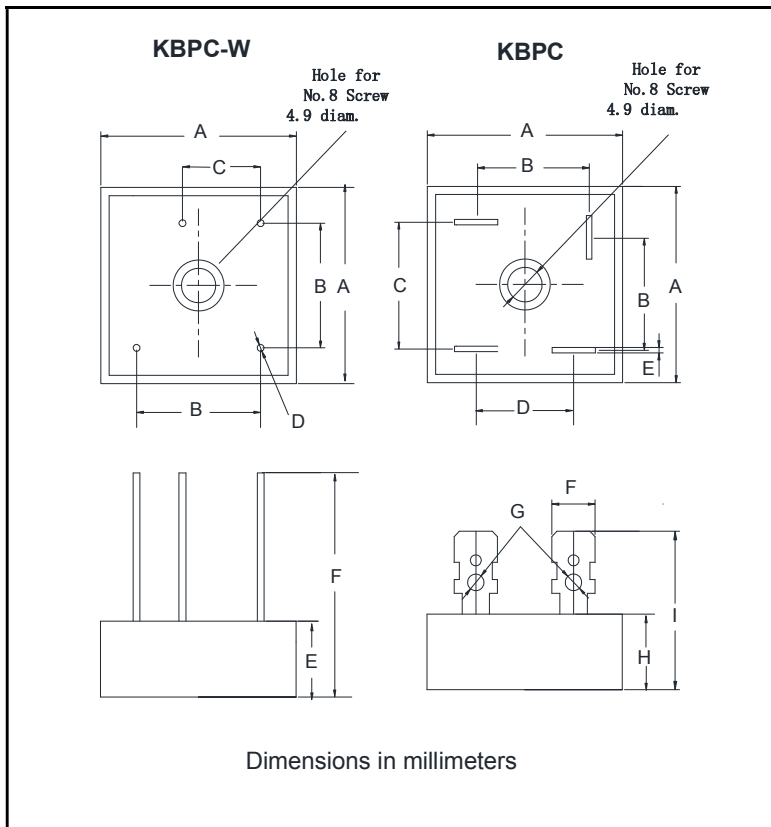
FIG4: Typical Reverse Characteristics





# KBPC35005(W) THRU KBPC3510(W)

## ■ Outline Dimensions



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	

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	2.4	2.6
H	10.8	11.2
I	19	



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