

# KBPC35005G/GW-KBPC3510G/GW



35A GLASS PASSIVATED  
BRIDGE RECTIFIER

## Features

- Glass Passivated Die Construction
- 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 2500V
- UL Listed Under Recognized Component Index, File Number E95060

KBPC-G

KBPC-G / KBPC-GW		
Dim	Min	Max
A	28.40	28.70
B	10.97	11.23
C	15.70	16.70
E	22.86	25.40
G	13.50	14.50
H	Hole for #10 screw 5.08 f Nominal	
J	17.50	18.50
K	10.90	11.90
L	0.97 f Nominal	
M	30.50	—
N	10.97	11.23
P	17.60	18.60
All Dimensions in mm		

## Mechanical Data

- Case: Molded Epoxy
- 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-G 24 grams (approx)
- KBPC-GW 21 grams (approx)
- Mounting Position: Any
- Marking: Type Number

KBPC-GW

W Suffix Designates Wire leads  
No Suffix Designates Faston 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	KBPC35 005G/W	KBPC35 01G/W	KBPC35 02G/W	KBPC35 04G/W	KBPC35 06G/W	KBPC35 08G/W	KBPC35 10G/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>	35							A
Non-Repetitive Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	400							A
Forward Voltage (per element) @ I <sub>F</sub> = 17.5A	V <sub>FM</sub>	1.1							V
Peak Reverse Current @ T <sub>C</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>C</sub> = 125°C	I <sub>R</sub>	5.0 500							μA
I <sup>2</sup> t Rating for Fusing (t<8.3ms) (Note 1)	I <sup>2</sup> t	660							A <sup>2</sup> s
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	300							pF
Typical Thermal Resistance Junction to Case (Note 3)	R <sub>θJC</sub>	2.7							K/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C

- Notes:
1. Measured at non-repetitive, for t > 1ms and < 8.3ms.
  2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
  3. Thermal resistance from junction to case per element mounted on PC board with 13 x 13mm (0.03mm thick) land areas.

