

# KBPC15, 25, 35G/W SERIES

## 15, 25, 35A GLASS PASSIVATED BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V

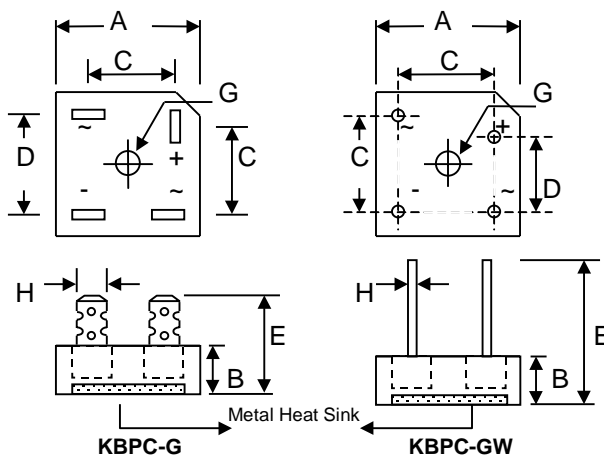
### Mechanical Data

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: KBPC-G 24 grams (approx.)  
KBPC-GW 21 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads

No Suffix Designates Faston Terminals

\*All Models are Available on B(Height)=7.9mm Max. Epoxy Case



	KBPC-G		KBPC-GW	
Dim	Min	Max	Min	Max
A	28.40	28.70	28.40	28.70
B	10.97	11.23	10.97	11.23
C	15.70	16.70	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø	1.07Ø
All Dimension in mm				

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	-00G/W	-01G/W	-02G/W	-04G/W	-06G/W	-08G/W	-10G/W	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	V <sub>RWM</sub>								
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectifier Output Current @T <sub>C</sub> = 55°C	I <sub>O</sub>	15 25 35							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	300 300 400							A
Forward Voltage Drop (per element)	V <sub>FM</sub>	KBPC15 @I <sub>F</sub> = 7.5A KBPC25 @I <sub>F</sub> = 12.5A KBPC35 @I <sub>F</sub> = 17.5A 1.1							V
Peak Reverse Current At Rated DC Blocking Voltage	I <sub>RM</sub>	@T <sub>C</sub> = 25°C @T <sub>C</sub> = 125°C 5.0 500							µA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms) (Note 1)	I <sup>2</sup> t	KBPC15 KBPC25 KBPC35 375 375 660							A <sup>2</sup> s

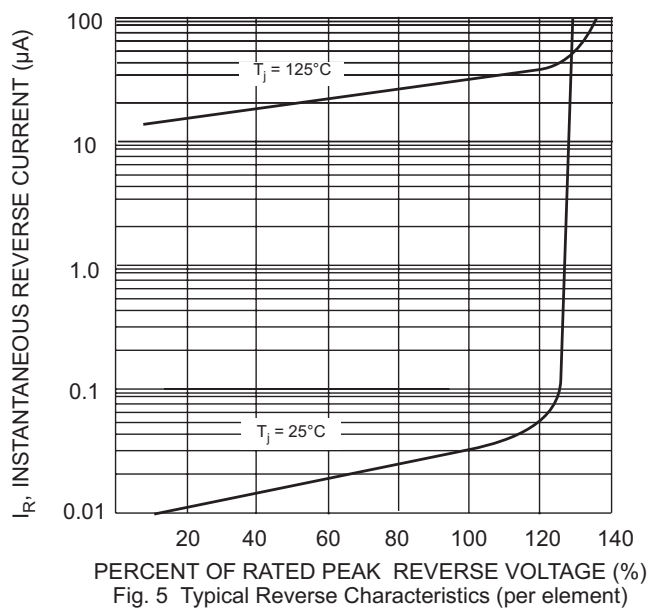
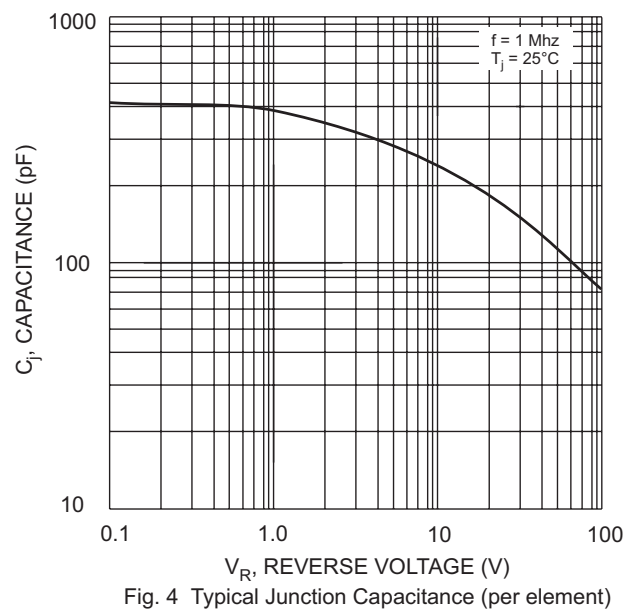
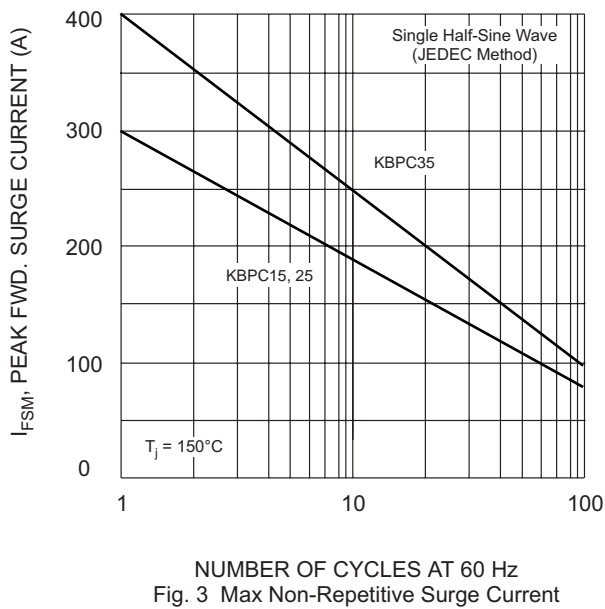
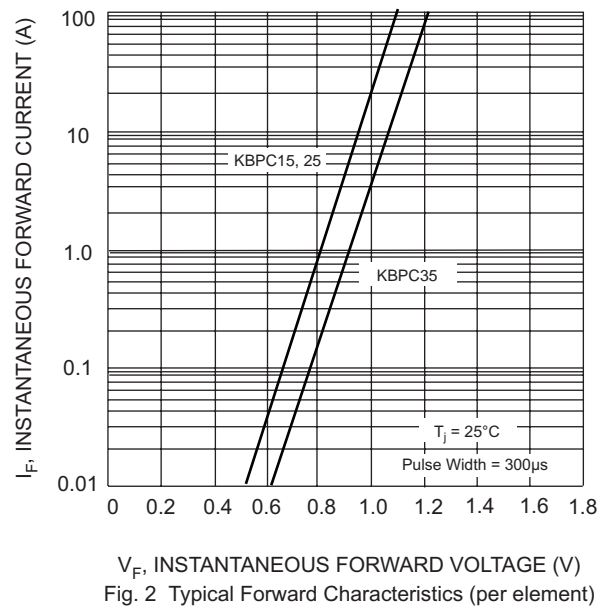
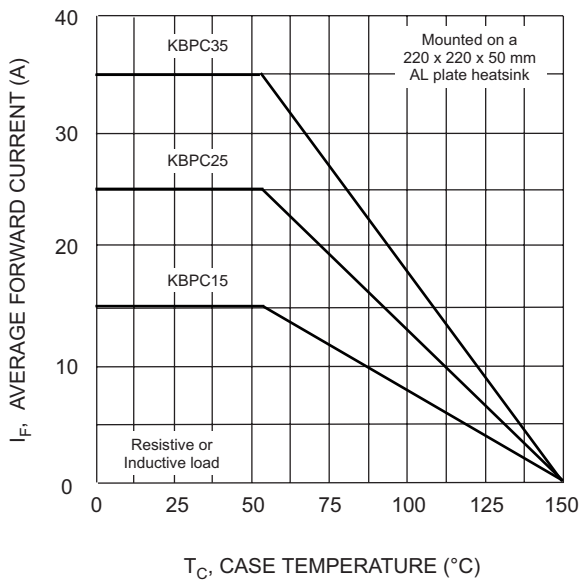
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**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

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Typical Junction Capacitance (per element) (Note 2)	C <sub>j</sub>	300	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3)	R <sub>θJC</sub>	5.3 3.6 3.0	K/W
RMS Isolation Voltage from Case to Lead	V <sub>ISO</sub>	2500	V
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150	°C

Note: 1. Measured at non-repetitive, for t > 1ms and < 8.3ms.  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
3. Thermal resistance junction to case mounted on heatsink.



## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
KBPCxx00G	Square Bridge	50 Units/Box
KBPCxx00GW	Square Bridge	50 Units/Box
KBPCxx01G	Square Bridge	50 Units/Box
KBPCxx01GW	Square Bridge	50 Units/Box
KBPCxx02G	Square Bridge	50 Units/Box
KBPCxx02GW	Square Bridge	50 Units/Box
KBPCxx04G	Square Bridge	50 Units/Box
KBPCxx04GW	Square Bridge	50 Units/Box
KBPCxx06G	Square Bridge	50 Units/Box
KBPCxx06GW	Square Bridge	50 Units/Box
KBPCxx08G	Square Bridge	50 Units/Box
KBPCxx08GW	Square Bridge	50 Units/Box
KBPCxx10G	Square Bridge	50 Units/Box
KBPCxx10GW	Square Bridge	50 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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**WARNING:** DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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