

GLASS PASSIVATED BRIDGE RECTIFIERS

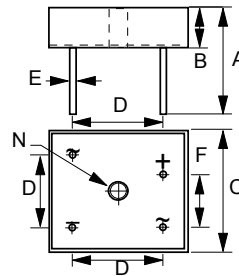
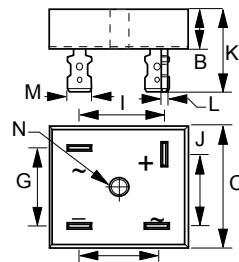
REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **35** Amperes

FEATURES

- Rating to 1000V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation
- UL recognized file # E95060

MECHANICAL DATA

- Case : Mounted in the bridge encapsulation
- Polarity : As marked on case
- Mounting : Hole for # 10 screw
- Weight : 0.85 ounces , 24.0 grams (terminal)
: 0.74 ounces , 21.0 grams (wire)

KBPC-GW (Wire)

KBPC-G (Terminal)


KBPC-G/KBPC-GW		
DIM.	MIN.	MAX.
A	31.80	-
B	7.90	8.40
C	28.30	28.80
D	17.60	18.60
E	0.97	1.07
F	10.90	11.90
G	17.60	18.60
H	13.80	14.80
I	16.10	17.10
J	16.10	17.10
K	18.80	21.30
L	0.76	0.86
M	6.30	6.50
N	HOLE FOR NO. 10 SCREW	
	5.08	5.59

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	KBPC35005G/W	KBPC3501G/W	KBPC3502G/W	KBPC3504G/W	KBPC3506G/W	KBPC3508G/W	KBPC3510G/W	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _C = T _a	I _(AV)	35.0							A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	400							A
Maximum forward Voltage at 17.5A DC	V _F	1.1							V
Maximum DC Reverse Current @T _J = 25°C @T _J = 125°C	I _R	5.0 500							uA
I ² t Rating for fusing (t < 8.3ms), (Note 1)	I ² t	660							A ² S
Typical Junction Capacitance per element (Note 2)	C _J	300							pF
Typical Thermal Resistance (Note 3, see Fig. 1)	R _{θJC}	3.0							°C/W
Operating Temperature Range	T _J	-55 to +150							°C
Storage Temperature Range	T _{STG}	-55 to +150							°C

NOTES : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

REV. 4, Sep-2010, KBDI03

FIG.1 - FORWARD CURRENT DERATING CURVE

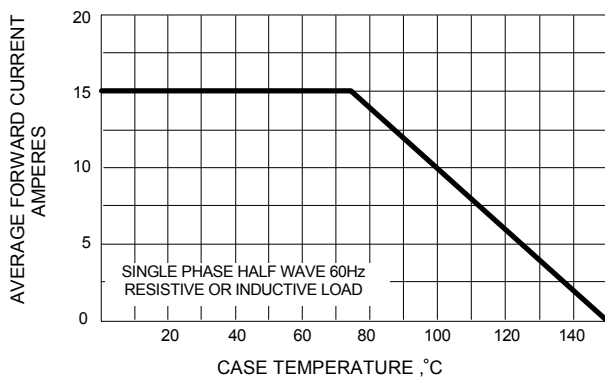


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

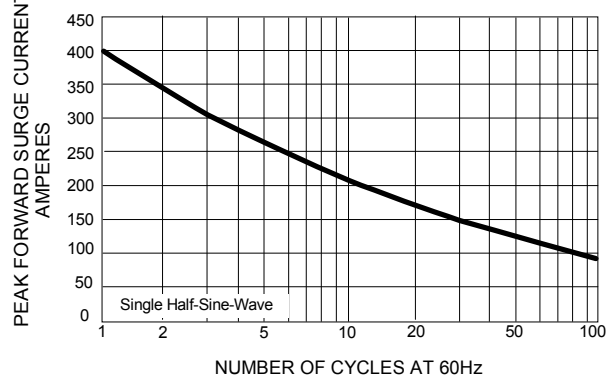


FIG.3 - TYPICAL JUNCTION CAPACITANCE

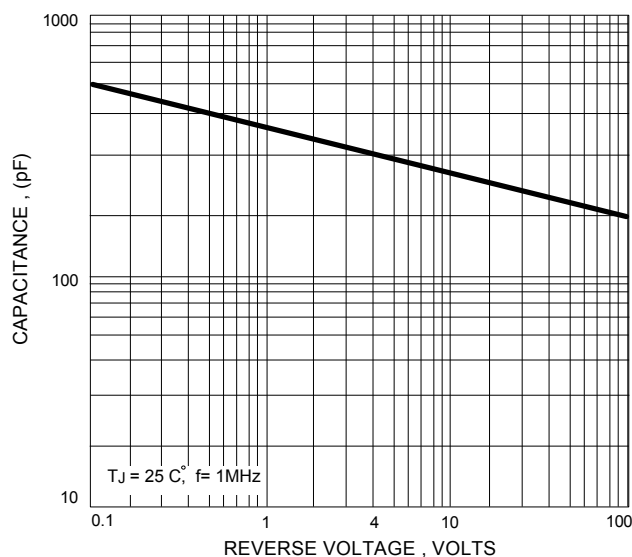


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

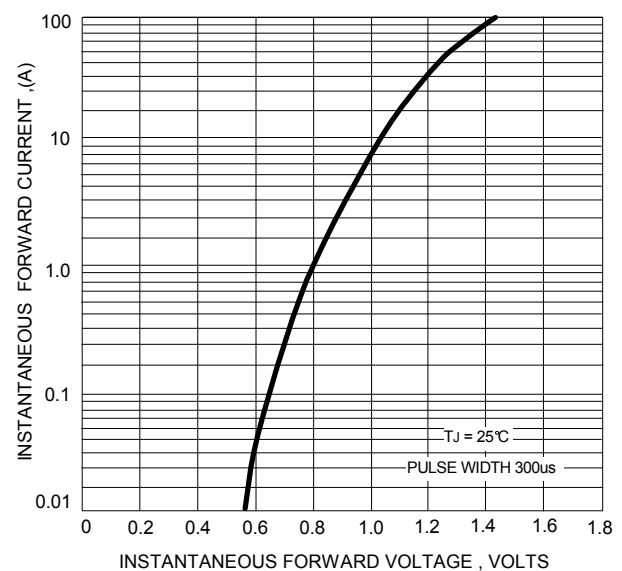
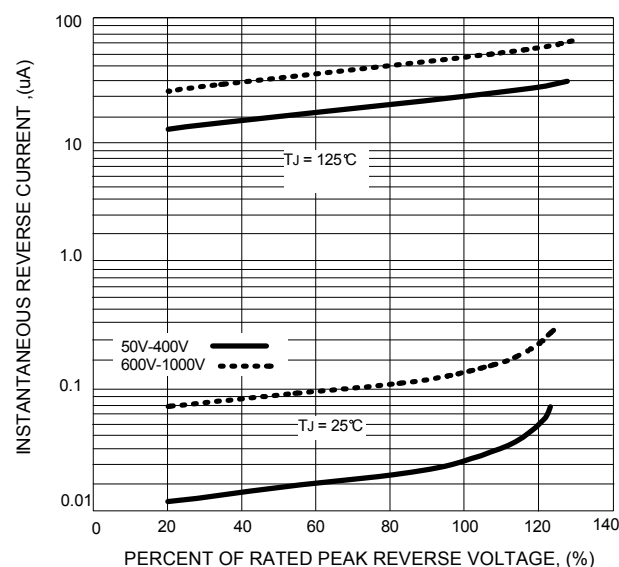


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.