

KBP06G – KBP10G(LS)

GLASS PASSIVATED BRIDGE RECTIFIERS

**REVERSE VOLTAGE – 600 to 1000 Volts
FORWARD CURRENT – 1.5 Amperes**

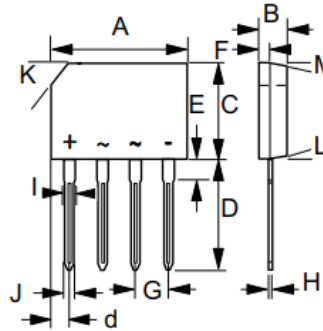
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL recognition file # E95060
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package: KBP
- Polarity indicator: As marked on the body
- Weight: 0.05 ounces, 1.52 grams
- Mounting position: Any

KBP



KBP		
DIM.	MIN.	MAX.
A	14.25	14.75
B	3.35	3.65
C	10.20	10.60
D	14.25	14.73
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.56	4.06
H	0.35	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7 x 45°(Typ.)	
L	-	3°
M	-	2°

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	KBP06G	KBP08G	KBP10G	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	600	800	1000	V
Maximum Average Rectified Output Current @T _C =105°C @T _A =75°C	I _{F(AV)}	1.5			A
Peak Forward Surge Current 8.3ms single half sine-wave	I _{FSM}	40			A
I ² t Rating for fusing (t = 8.3ms)	I ² t	6.6			A ² S
Maximum Forward Voltage at 1.5A DC	V _F	1.1			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @ T _J =125°C	I _R	5 500			uA
Typical Junction Capacitance per element (Note 4)	C _J	20			pF
Typical Thermal Resistance (Note 5)	R _{thJc}	18			°C/W
Operating junction temperature range	T _J	-55 to +150			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

Notes:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied reverse voltage of 4.0VDC.
5. Unit Mounted on 75mm x 75mm x 1.6mm Cu plate heatsink.

RATING AND CHARACTERISTIC CURVES
KBP06G – KBP10G

FIG.1- FORWARD CURRENT DERATING CURVE

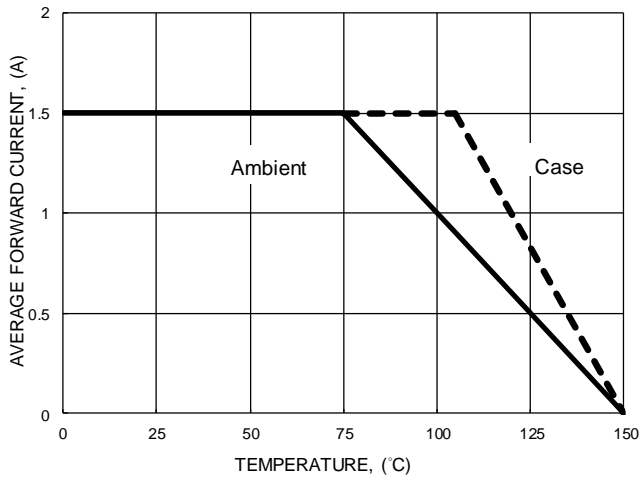


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

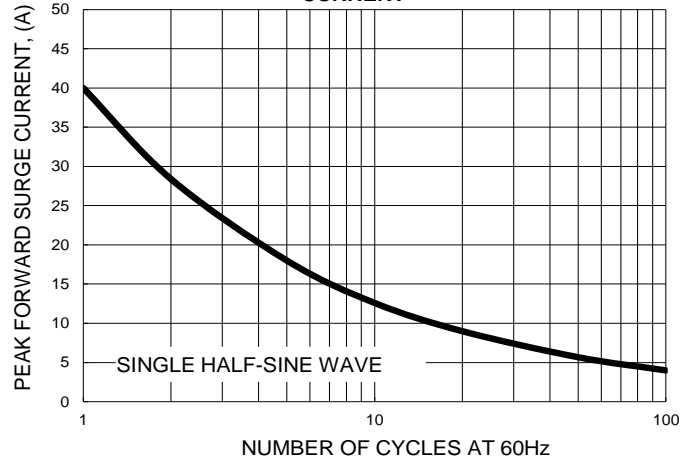


FIG.3- TYPICAL JUNCTION CAPACITANCE

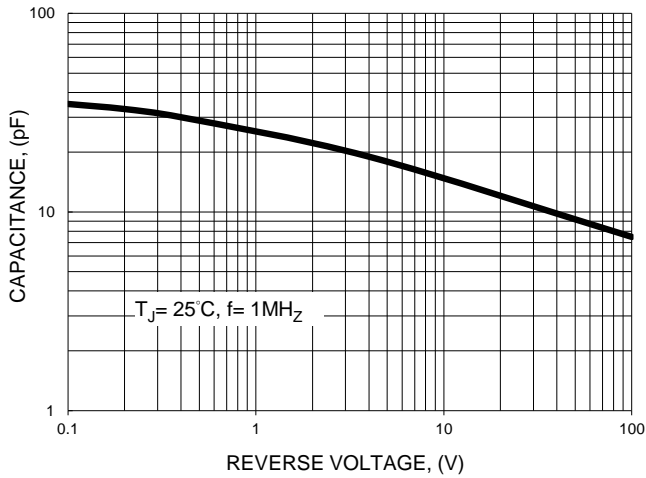


FIG.4- TYPICAL FORWARD CHARACTERISTICS

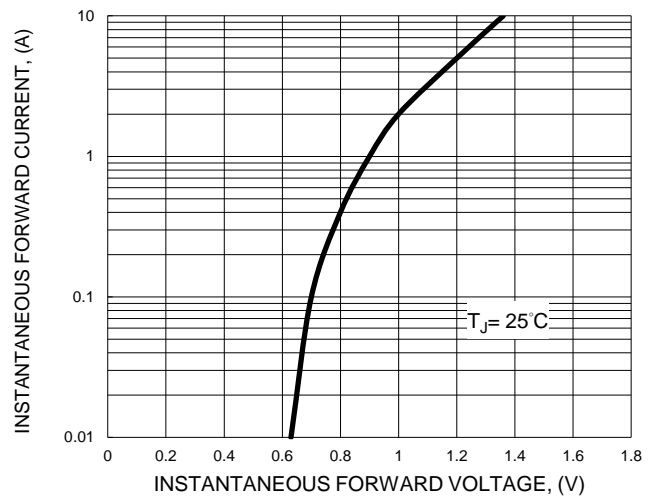
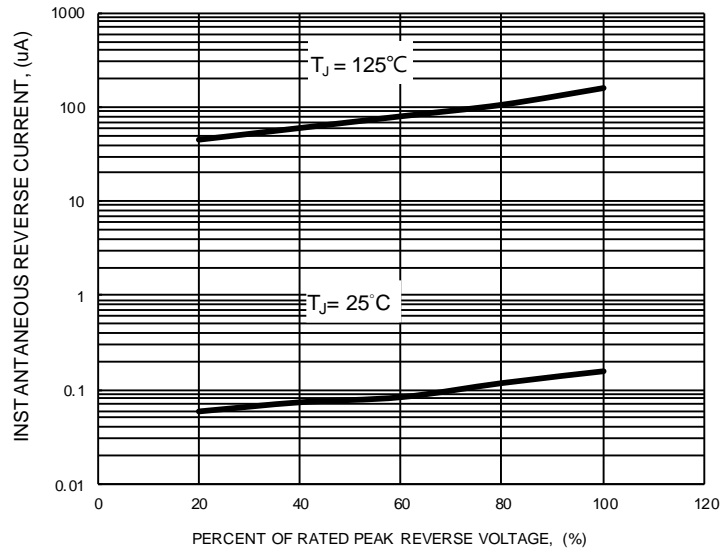


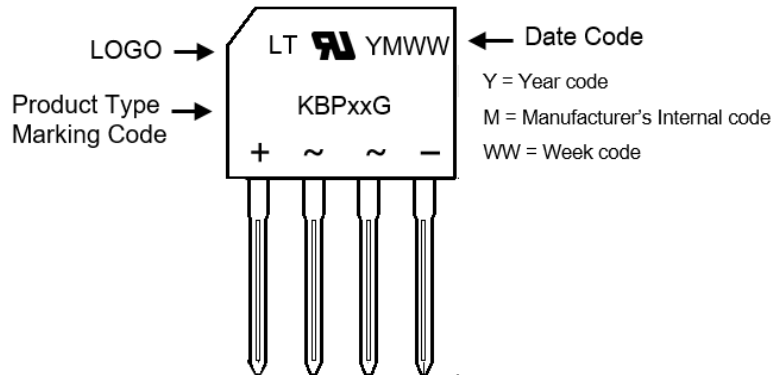
FIG.5- TYPICAL REVERSE CHARACTERISTICS



Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
KBP06G_HF	KBP	35Pcs	Tube
KBP08G_HF	KBP	35Pcs	Tube
KBP10G_HF	KBP	35Pcs	Tube

Marking Information:



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