

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **1.5** Amperes

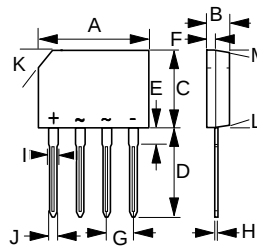
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- UL recognized file # E95060

MECHANICAL DATA

- Polarity : As marked on 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
E	2.10	2.50
F	0.80	1.10
G	3.56	4.06
H	0.30	0.64
I	1.17	1.42
J	0.76	0.86
K	2.8 x 45°	
L	-	3°
M	-	2°
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	KBP 005G	KBP 01G	KBP 02G	KBP 04G	KBP 06G	KBP 08G	KBP 10G	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 =105 °C @T _A =75 °C	I _(AV)	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I _{FSM}	40							A
Maximum forward Voltage at 1.5A DC	V _F	1.1							V
Maximum DC Reverse Current @T _J =25 °C at Rated DC Blocking Voltage @T _J =125 °C	I _R	5.0 500							uA
I ² t Rating for fusing (t < 8.3ms)	I ² t	6.6							A ² S
Typical Junction Capacitance per element (Note 1)	C _J	20							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	18							°C/W
Operating Temperature Range	T _J	-55 to 150							°C
Storage Temperature Range	T _{STG}	-55 to 150							°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0VDC.
2.Unit Mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

REV. 3, 08-Mar-2002, KBDE01

FIG.1 - FORWARD CURRENT DERATING CURVE

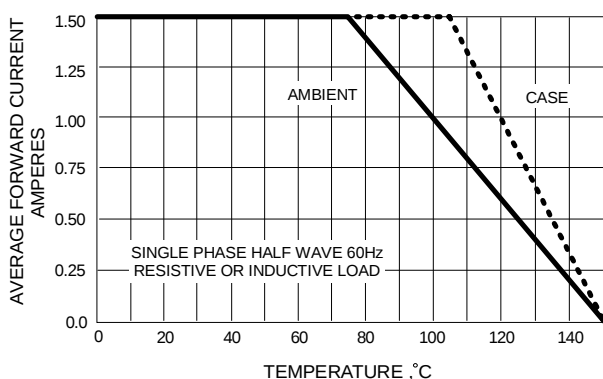


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

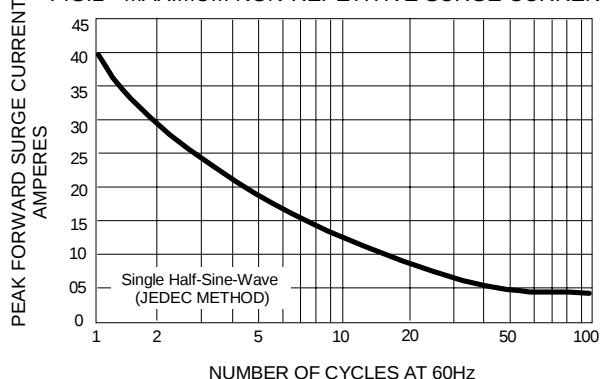


FIG.3 - TYPICAL JUNCTION CAPACITANCE

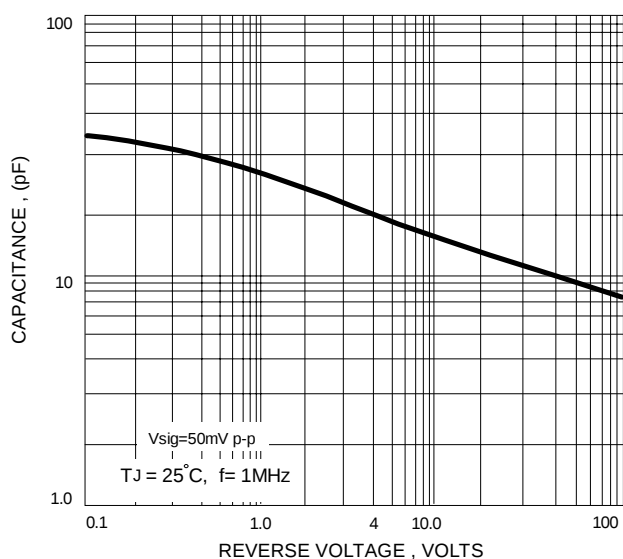


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

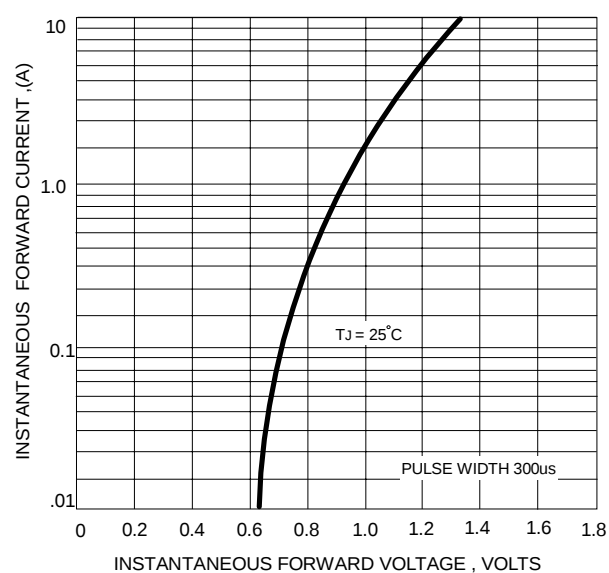


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

