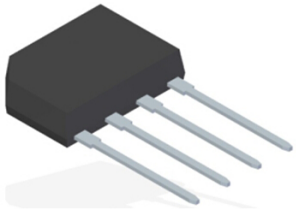
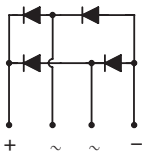
KBP3005G THRU KBP310G

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **- 50** to **1000** Volts
FORWARD CURRENT **- 3.0** Amperes

KBP





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

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	KBP 3005G	KBP 301G	KBP 302G	KBP 304G	KBP 306G	KBP 308G	KBP 310G	UNIT
Maximum Repetitive 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 (With heatsink) (Without heatsink)	$I_{(AV)}$	3.0 1.9							A
Peak Forward Surge Current 8.3ms single half sine-wave @ Tj = 25 ℃	I_{FSM}	75							A
Peak Forward Surge Current 1.0ms single half sine-wave @ Tj = 25 ℃	I_{FSM}	150							A
Maximum Forward Voltage at 3.0A DC	V_F	1.1							V
Maximum DC Reverse Current at rated Blocking Voltage @Tj=25°C @Tj=125°C	I_R	5.0 500							uA
I^2t Rating for fusing (3ms≦t ≦8.3ms)	I^2t	26.5							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	50							pF
Typical thermal resistance (Unit mounted on 30mmx30mmx1mm Copper plate heatsink.)	$R\Theta_{JC}$ $R\Theta_{JL}$ $R\Theta_{JA}$	10 12 30							°C/W
Typical thermal resistance (without heatsink)	$R\Theta_{JC}$ $R\Theta_{JL}$ $R\Theta_{JA}$	12 18 40							°C/W
Operation Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

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FIG.1- FORWARD CURRENT DERATING CURVE

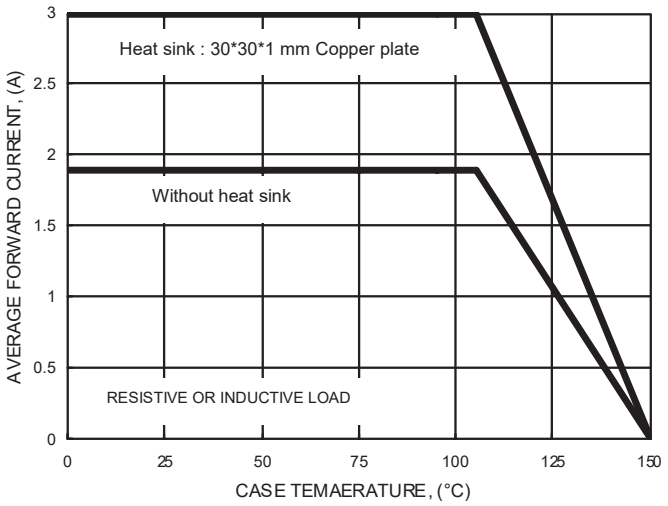


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

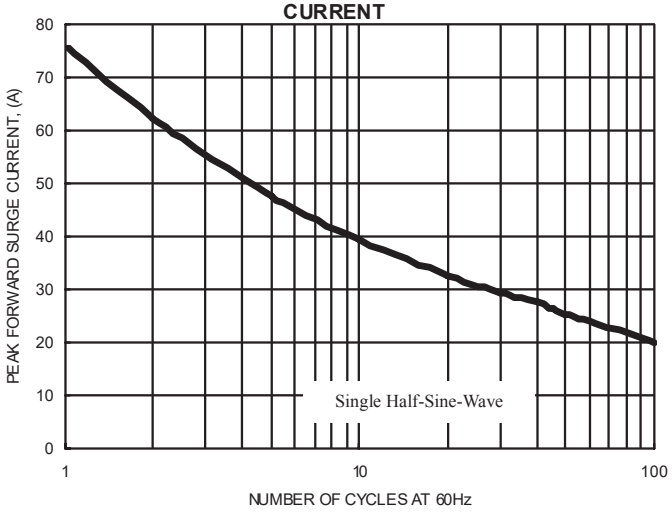


FIG.3- TYPICAL JUNCTION CAPACITANCE

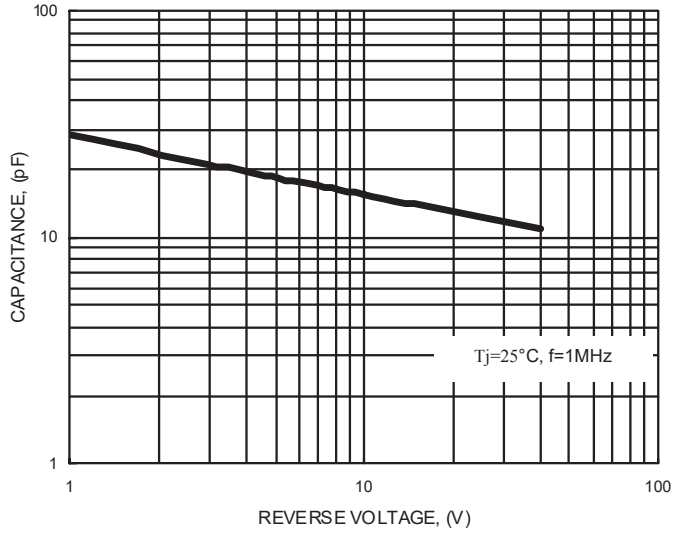


FIG.4- TYPICAL FORWORD CHARACTERISTICS

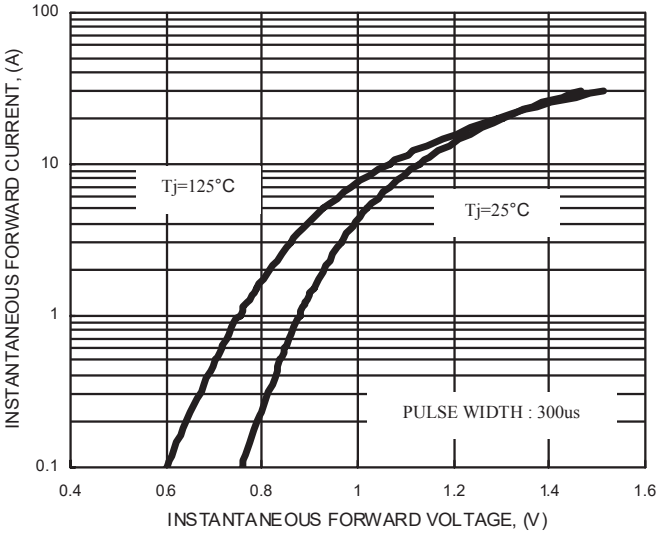
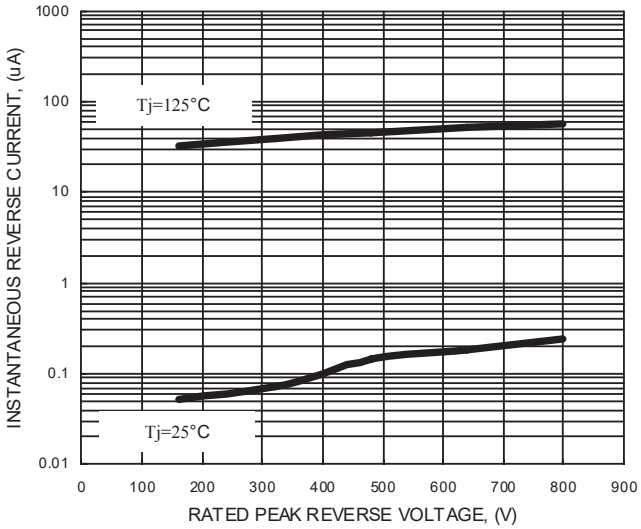
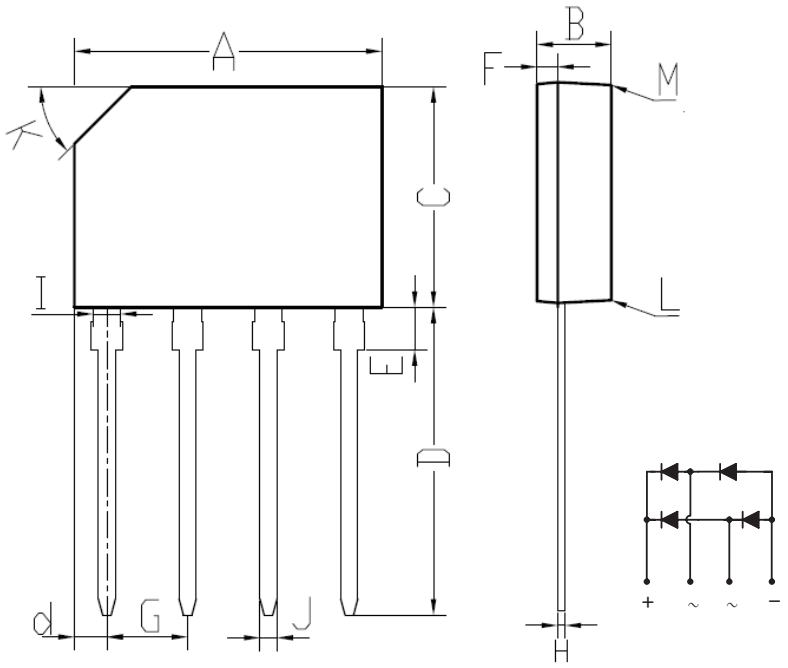


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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KBP Package Outline Dimensions



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		

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