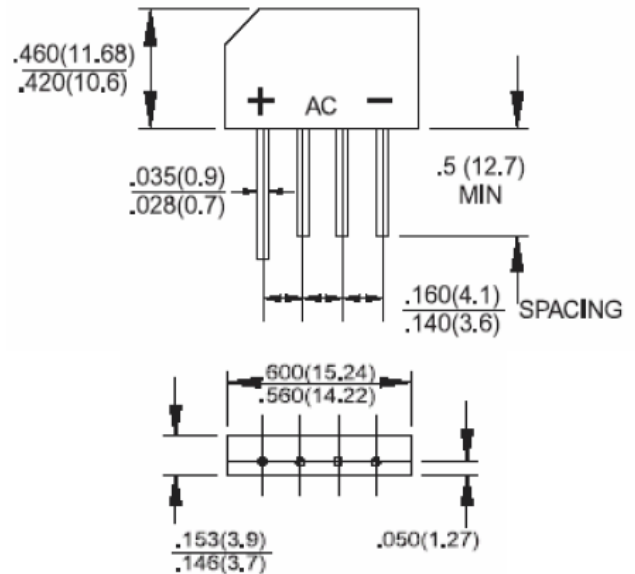




**RoHS**  
COMPLIANCE



### KBP



### Features

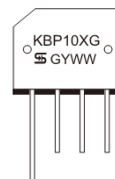
- ✧ UL Recognized File #E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:  
260°C/10 seconds at 5 lbs.,(2.3kg) tension
- ✧ Small size, simple installation
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

### Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208
- ✧ Weight: 1.52 grams

### Dimensions in inches and (millimeters)

#### Marking Diagram



- KBP10XG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

### Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

Type Number	Symbol	KBP 101G	KBP 102G	KBP 103G	KBP 104G	KBP 105G	KBP 106G	KBP 107G	Units
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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage (Note 1) @1 A	$V_F$	1.0							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$ $\mu\text{A}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$ $R_{\theta JL}$	28 10							$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	- 55 to + 150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^\circ\text{C}$

Note 1 : Pulse Test with PW=300u sec, 1% Duty Cycle

Note 2 : Mounted on P.C.B. with 0.2" x 0.2"(5 x 5mm) Copper Pads.

## RATINGS AND CHARACTERISTIC CURVES (KBP101G THRU KBP107G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

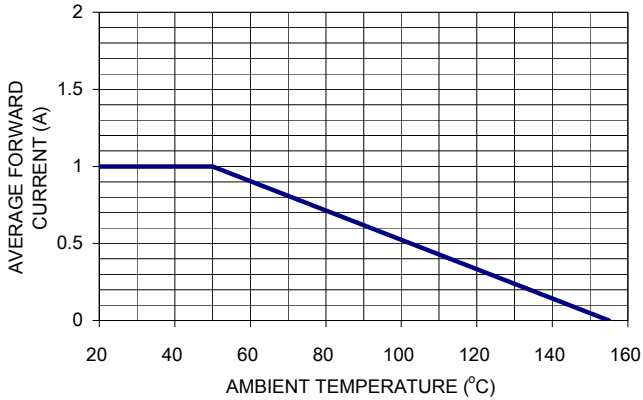


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

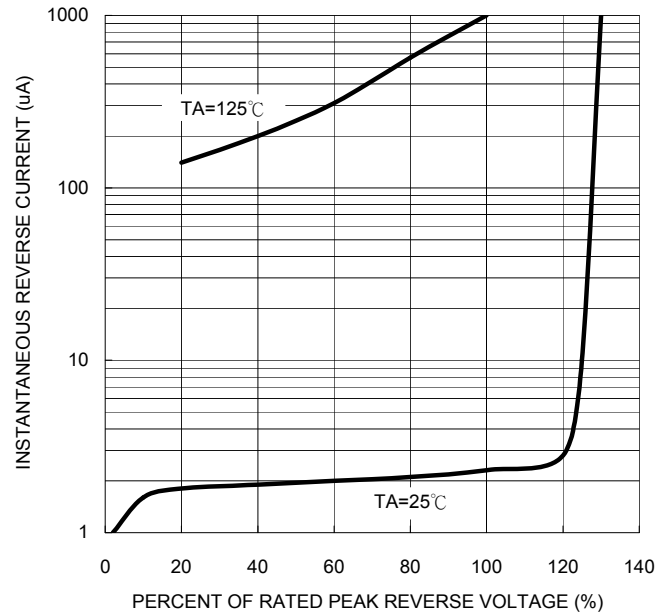


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

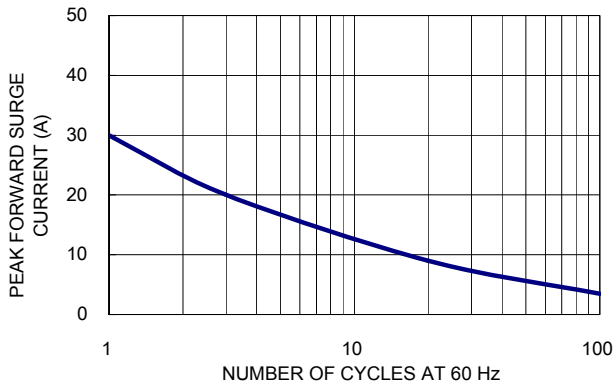


FIG. 4- TYPICAL JUNCTION CAPACITANCE

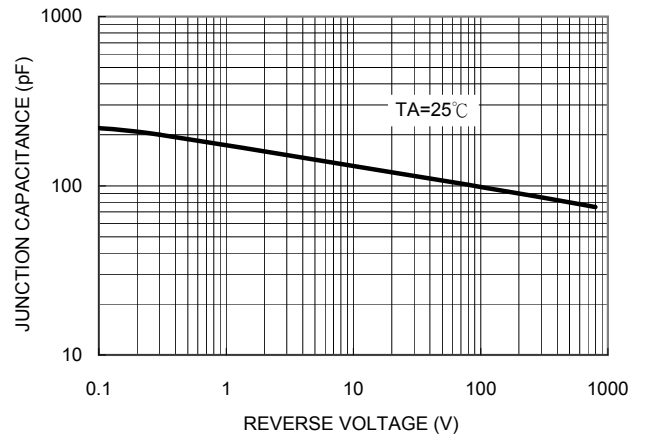


FIG. 5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

