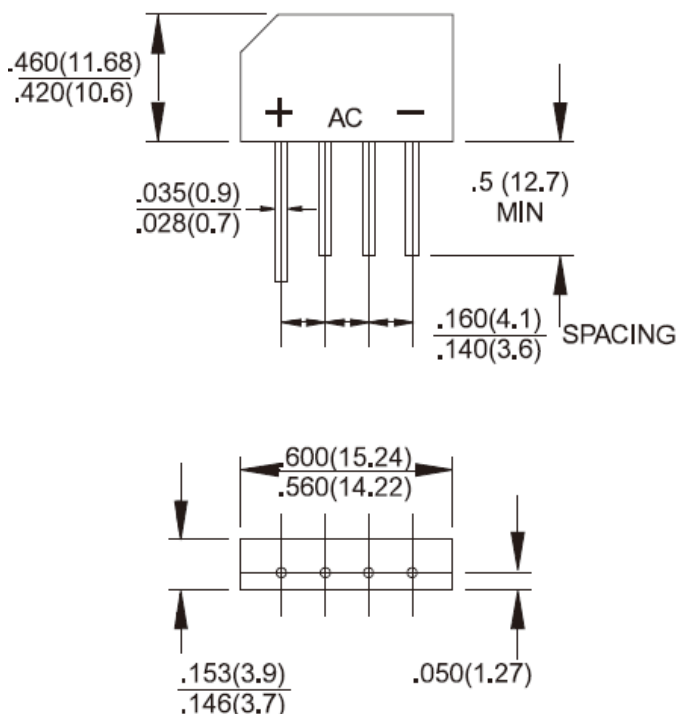




RoHS  
COMPLIANCE



### KBP



### Features

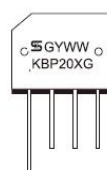
- ✦ UL Recognized File #E-326243
- ✦ Glass passivated junction
- ✦ Ideal for printed circuit board
- ✦ Reliable low cost construction technique results in inexpensive product
- ✦ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs.(2.3kg) tension
- ✦ Small size, simple installation
- ✦ Green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

### Mechanical Data

- ✦ Case: Molded plastic body
- ✦ Terminal: Leads solderable per MIL-STD-202 Method 208
- ✦ Weight: 1.52 grams

### Dimensions in inches and (millimeters)

#### Marking Diagram



- KBP20XG = 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 201G	KBP 202G	KBP 203G	KBP 204G	KBP 205G	KBP 206G	KBP 207G	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 @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	60							A
Rating of fusing ( $t < 8.35\text{ms}$ )	$I^2T$	15							A <sup>2</sup> S
Maximum Instantaneous Forward Voltage (Note 1) @ 2 A	$V_F$	1.2							V
Maximum DC Reverse Current at Rated DC Block Voltage @ $T_A=25^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
@ $T_A=125^\circ\text{C}$		500							
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	25 8							$^\circ\text{C/W}$
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=300 usec, 1% Duty Cycle

## RATINGS AND CHARACTERISTIC CURVES (KBP201G THRU KBP207G)

FIG. 1 FORWARD CURRENT DERATING CURVE

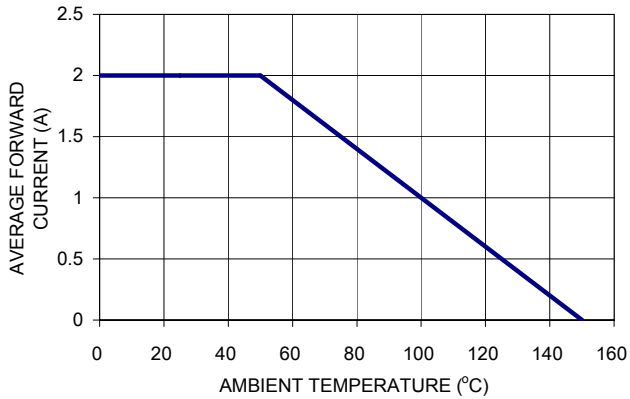


FIG. 2 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

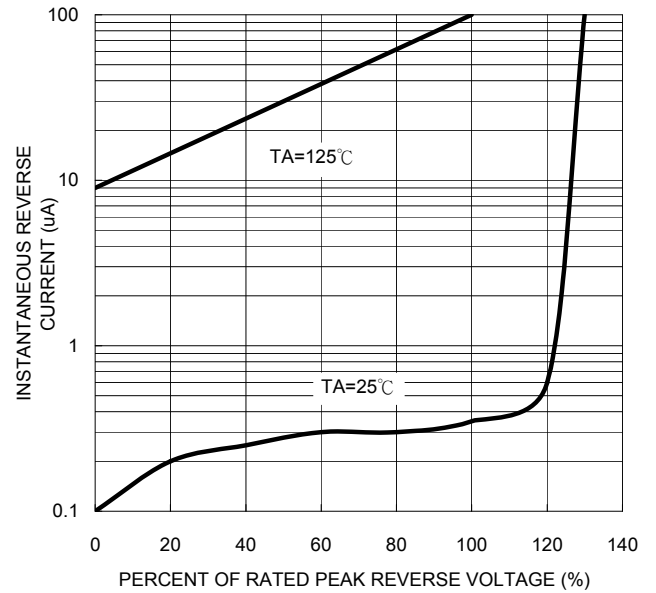


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

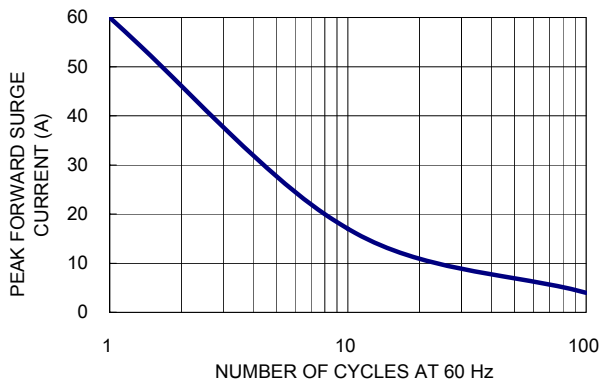


FIG. 4 TYPICAL JUNCTION CAPACITANCE

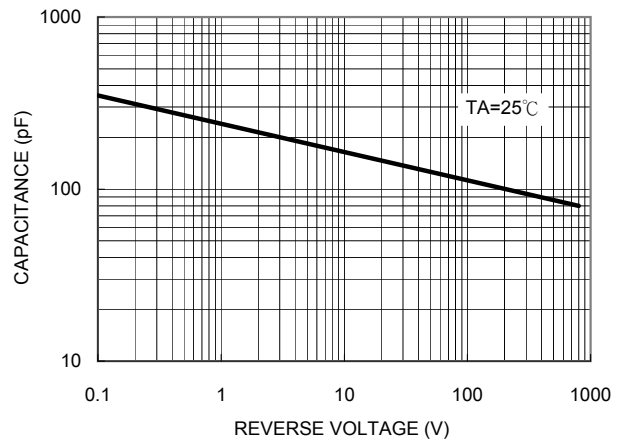


FIG. 5 TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

