



## SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIER

**2KBP005G THRU 2KBP10G**

**VOLTAGE RANGE**

**50 to 1000 Volts**

**CURRENT**

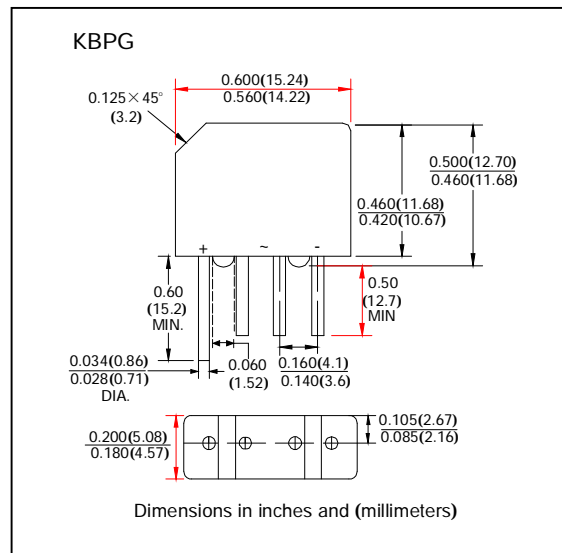
**20 Ampere**

### FEATURES

- Plastic package has UL flammability Classification 94V-0
- Glass passivated chip junction
- High case dielectric strength of 1500V<sub>RMS</sub>
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds, 0.375”(9.5mm) lead length

### MECHANICAL DATA

- Case: molded plastic body
- Terminal: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting position: Any
- Weight: 0.069 ounce, 1.95 gram



### 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%

	SYMBOLS	2KBP 005G	2KBP 01G	2KBP 02G	2KBP 04G	2KBP 06G	2KBP 08G	2KBP 10G	UNIT
Maximum Reverse Peak Repetitive Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output At $T_C=65^\circ\text{C}$	$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							Amps
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	15							$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage drop Per Bridge element 2.0A	$V_F$	1.1							Volts
Maximum Reverse Current at rated DC blocking voltage per element	$T_A=25^\circ\text{C}$	5.0							$\mu\text{A}$
	$T_A=125^\circ\text{C}$	250							
Typical Junction Capacitance per leg (Note 1)	$C_J$	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	28							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	(-55 to +150)							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							$^\circ\text{C}$

**Notes:** 1. Measured at 1.0MHz and applied reverse voltage of 4.0 V  
 2. Unit mounted on P.C. board with 0.47' x 0.47" (12 x 12mm) copper pads, 0.375" (9.5mm) lead length



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CURRENT

2.0 Ampere

## RATINGS AND CHARACTERISTIC CURVES 2KBP005G THRU 2KBP10G

FIG. 1- DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

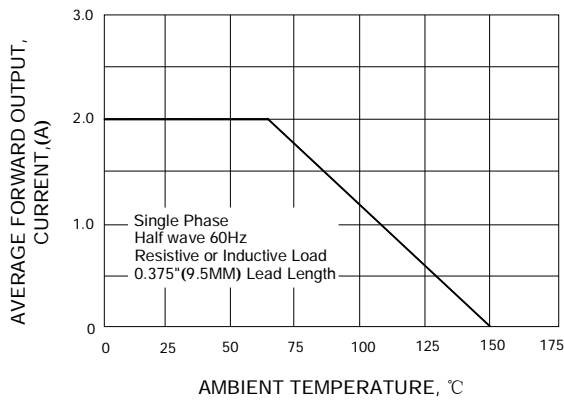


FIG. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

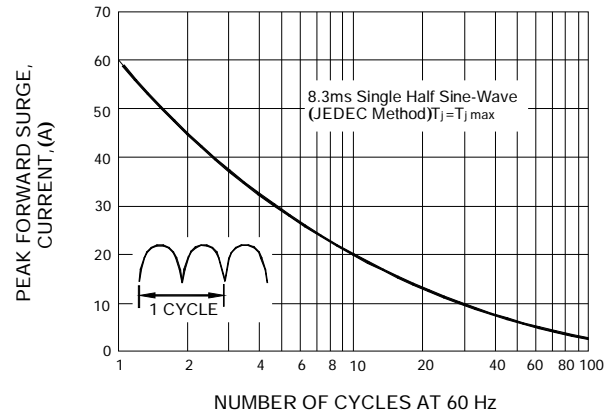


FIG. 3- TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

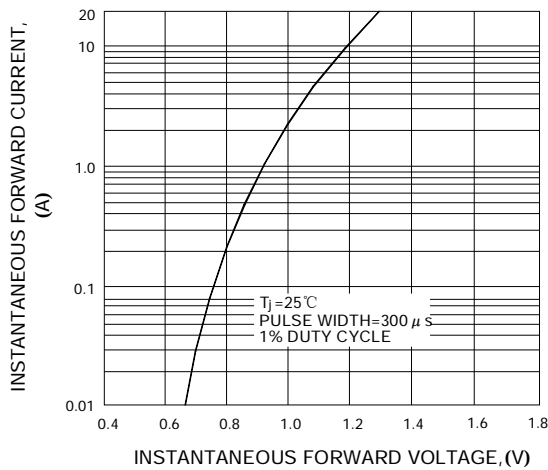


FIG. 4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

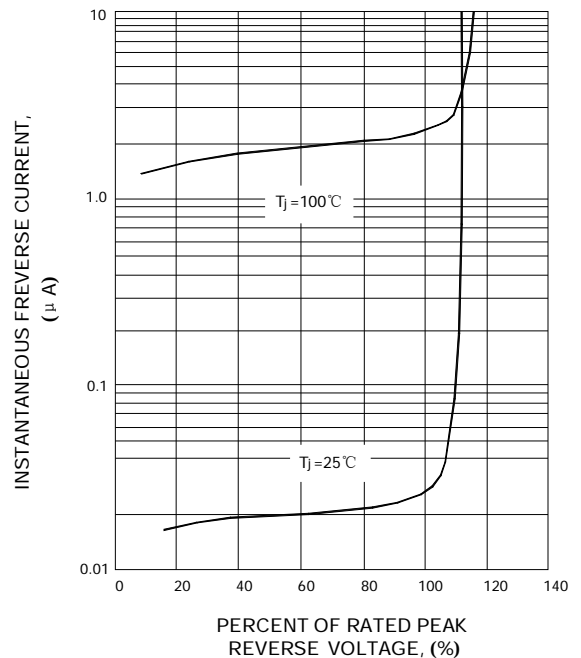


FIG. 5- TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

