



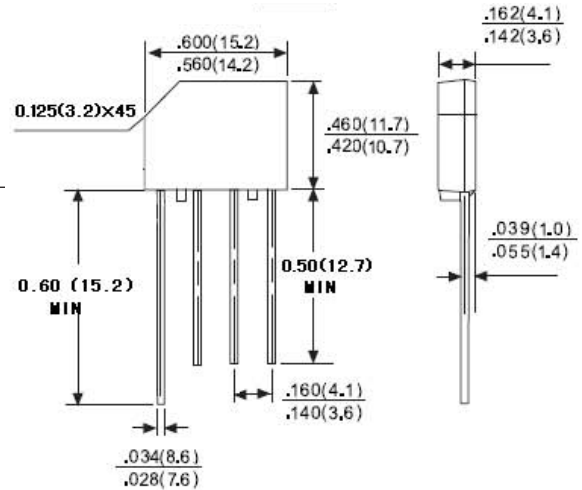
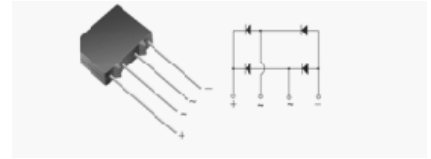
Miniature Glass Passivated Single-Phase Bridge Rectifiers  
Reverse Voltage 50 to 1000 Volta , Forward Current 2.0 Ampere

### Features

- ◆ Ideal for printed circuit board
- ◆ Glass passivated chip junctions
- ◆ High surge overload rating: 60A peak
- ◆ High case dielectric strength
- ◆ Solder DIP 260°C , 40 seconds

### Mechanical Data

- ◆ Case: KBPM  
Epoxy meets UL-94V-0 Flammability rating
- ◆ Terminals: Silver plated (E4 Suffix) Leads, solderable per J-STD-002B and JESD22-B102D
- ◆ Polarity : As marked on body



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

(T = 25°C unless otherwise noted)

Parameter	Symbol	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	800	Volts
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified output current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	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 ( $t < 8.3$ ms)	$I^2T$	15							A <sup>2</sup> SEC
Max. instantaneous forward voltage drop per element (Test conditions 2 A)	$V_F$	1.1							Volts
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage per element $T_A=125^\circ\text{C}$	$I_R$	5.0 100							$\mu\text{A}$
Typical junction capacitance per element at 4.0V, 1MHZ	$C_J$	25							pF
Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	30 11							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							$^\circ\text{C}$

Notes: 1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47"X0.47" (12X12 mm) copper pads

\* JEDEC registered values



## RATINGS AND CHARACTERISTICS CURVES

( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

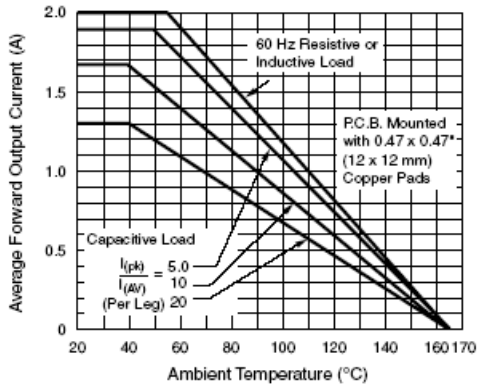


Figure 1. Derating Curve Output Rectified Current

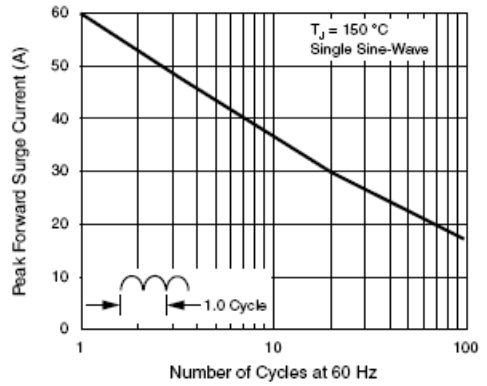


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

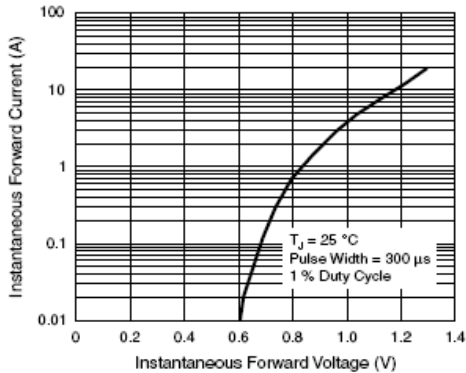


Figure 3. Typical Forward Characteristics Per Diode

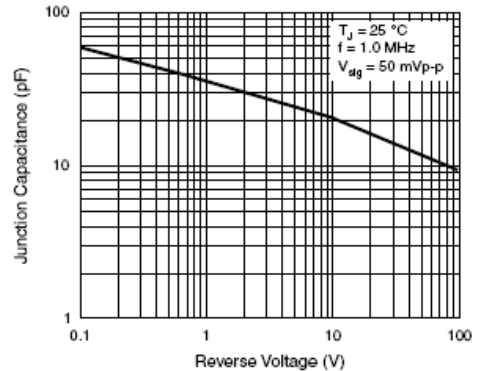


Figure 5. Typical Junction Capacitance Per Diode

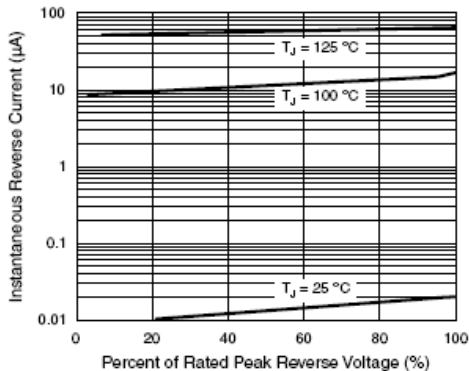


Figure 4. Typical Reverse Leakage Characteristics Per Diode