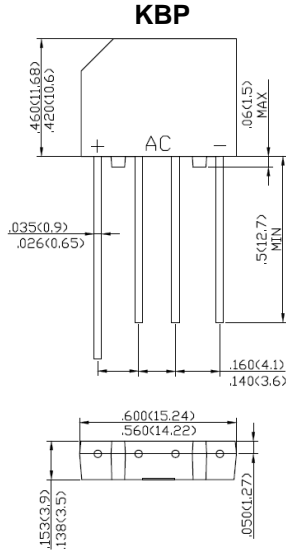


**KBP2005 THRU KBP210**

Single Phase 2.0 AMPS. Silicon Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 2.0 Amperes



Dimensions in inches and (millimeters)

**FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

**MECHANICAL DATA**

Case: Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbols marked on case

Mounting Position: Any

**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%

	Symbol	KBP 2005	KBP 201	KBP 202	KBP 204	KBP 206	KBP 208	KBP 210	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{DC}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{RMS}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 50^\circ\text{C}$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	35							A
Maximum Instantaneous Forward Voltage @ 2.0A	$V_F$	1.1							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)	$R_{\theta JA}$ $R_{\theta JL}$	25 8							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

Note: Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B.  
With 0.47 x 0.47" (12 x 12mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES KBP2005 THRU KBP210

FIG.1 MAXIMUM NON REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

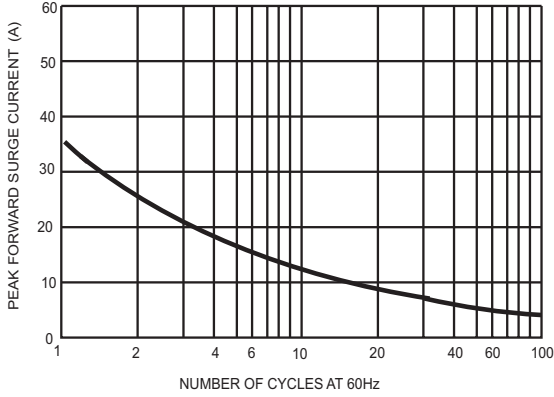


FIG.2 MAXIMUM FORWARD CURRENT DERATING CURVE

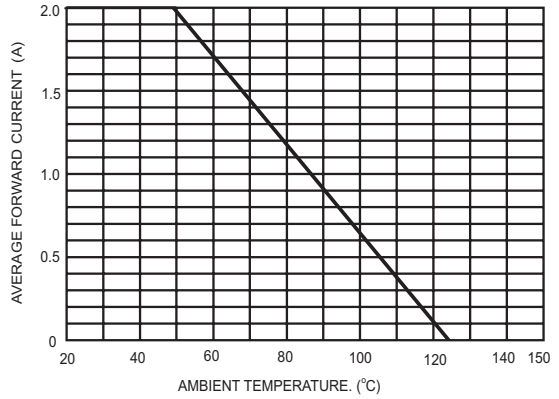
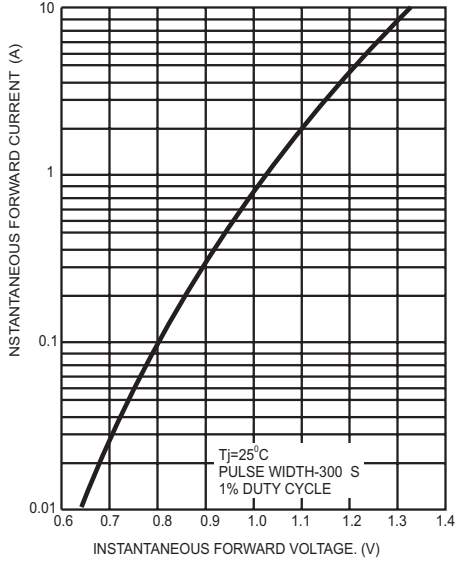


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT



$T_J = 125^\circ\text{C}$

FIG.4 TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

