

# KBP2005 THRU KBP210

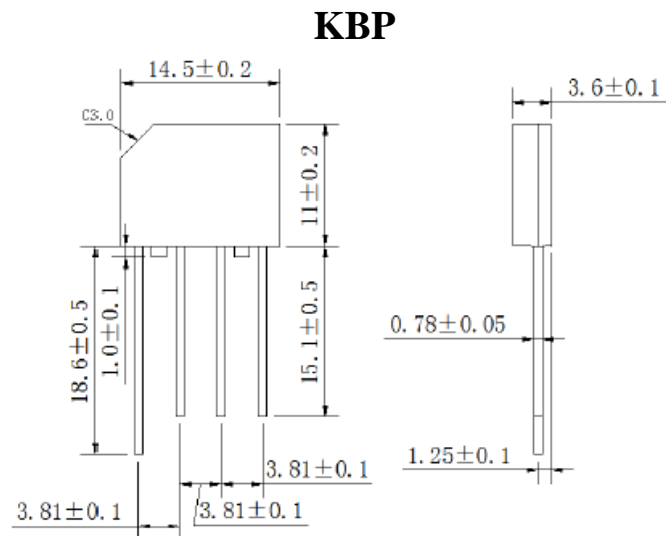
## 2A SINGLE-PHASE BRIDGE RECTIFIERS RECTIFIER REVERSE VOLTAGE 50 to 1000 Volts

### FEATURES

- ◆ Ideal for printed circuit board mounting
- ◆ The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- ◆ Built-in printed circuit board stand-offs
- ◆ High case dielectric strength
- ◆ High temperature soldering guaranteed 265°C/10 seconds at 5 lbs (2.3kg) tension

### MECHANICAL DATA

- ◆ Case: Reliable low cost construction utilizing molded plastic technique
- ◆ Terminals: Plated Leads solderable per MIL-STD-202, Method 208
- ◆ Mounting Position: Any



Dimensions in millimeters (1mm=0.0394")

### MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified, Resistive or inductive load, 60Hz.

For Capacitive load derate current by 20%.

CHARACTERISTICS	SYMBOL	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	
Maximum average forward rectified output current at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	60							A
Operating junction and storage temperature range	$T_j$ $T_{STG}$	-55 to +150							°C

### ELECTRICAL CHARACTERISTICS

Rating at 25 ambient temperature unless otherwise specified, Resistive or inductive load, 60Hz.

For Capacitive load derate by 20%.

Parameter	SYMBOL	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	UNIT
Maximum instantaneous forward voltage drop per leg at 2.0A	$V_F$	1.1							V
Maximum DC reverse current at rated $T_A=25^\circ\text{C}$ DC blocking voltage per element $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$

Note:

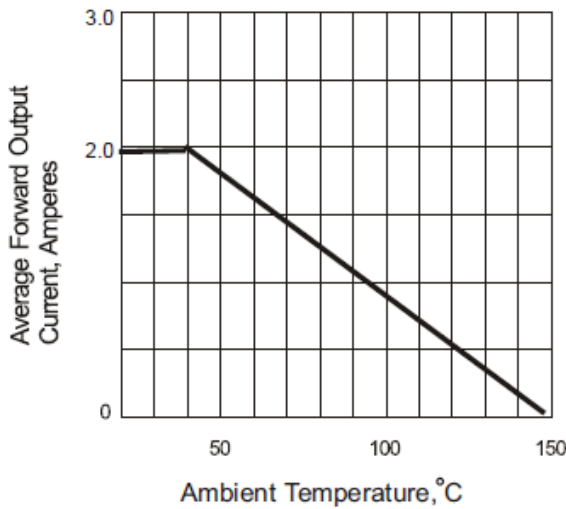
1. Thermal resistance from Junction to Ambient on P.C. board mounting.
2. Measured at 2.0 MHz and applied reverse voltage of 4.0 volts.

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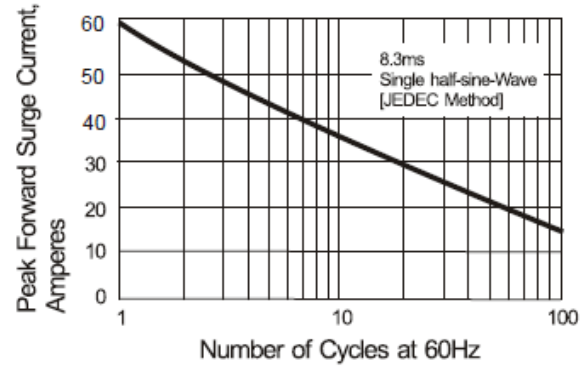
## 2A SINGLE-PHASE BRIDGE RECTIFIERS RECTIFIER REVERSE VOLTAGE 50 to 1000 Volts

### RATING AND CHARACTERISTIC CURVES (T<sub>A</sub>=25°C Unless otherwise noted)

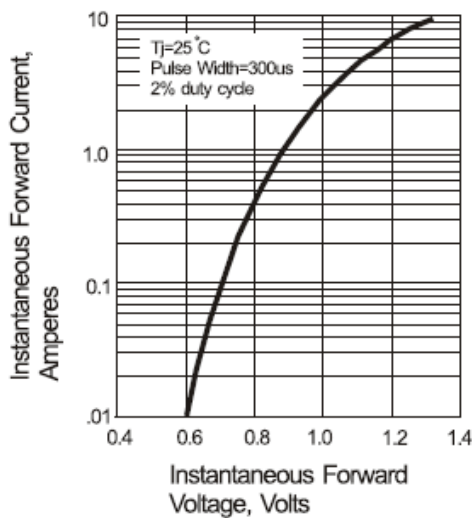
**Fig. 1 Derating Curve for Output Rectified Current**



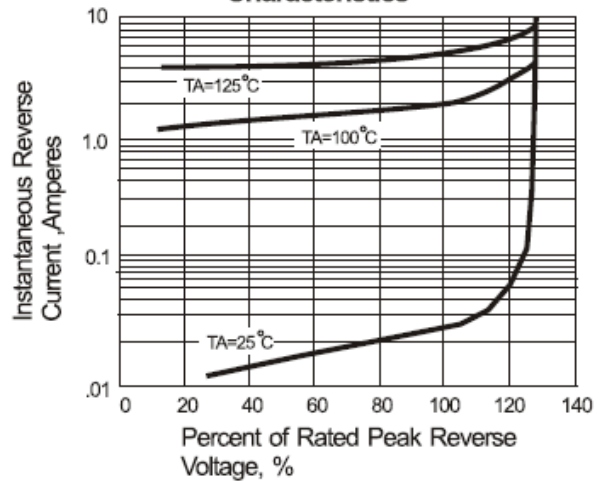
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



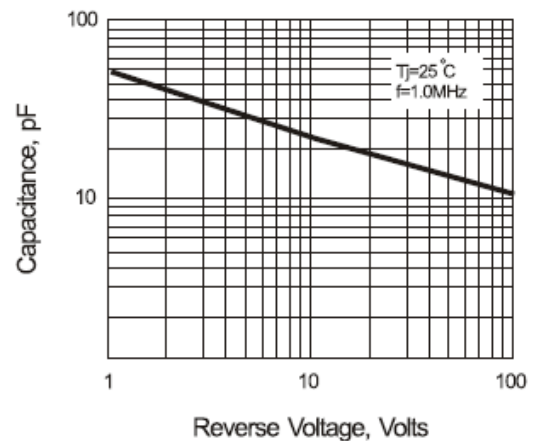
**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics**



**Fig. 5 Typical Junction Capacitance**



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.