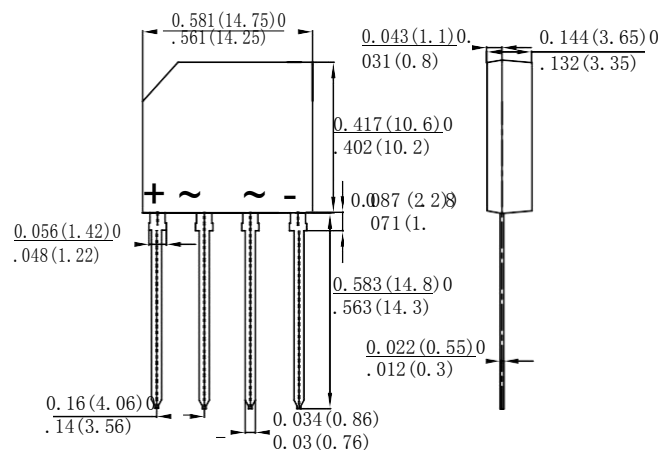


## SINGLE BRIDGE RECTIFIERS

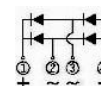
### Features

- ◆ Glass Passivated Chip Junction
- ◆ 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 :** JEDEC KBP Molded plastic body  
**Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026  
**Polarity :** Polarity symbol marking on body  
**Mounting Position :** Any  
**Weight :** 0.0693 ounce,1.95 grams



Dimensions in inches and (millimeters)

### 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 current derate by 20%.

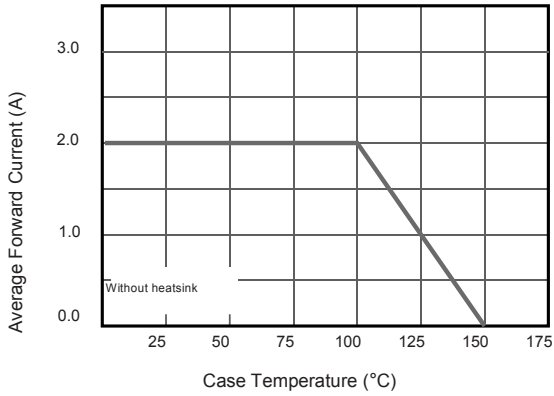
Parameter	SYMBOLS	RCD								UNITS
		KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210		
Marking Code										
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V	
Maximum average forward output rectified current at T <sub>c</sub> =50 C(Note 2)	I <sub>(AV)</sub>	2.0							A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	55							A	
Maximum instantaneous forward voltage drop per bridge element at 2.0A	V <sub>F</sub>	1.1							V	
Maximum DC reverse current T <sub>A</sub> =25°C at rated DC blocking voltage T <sub>A</sub> =125°C	I <sub>R</sub>	5 500							μA mA	
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	25							pF	
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub> R <sub>θJC</sub> R <sub>θJL</sub>	40 10 18							°C/W	
I <sup>2</sup> t Rating for fusing (3ms ≤ t ≤ 8.3ms)	I <sup>2</sup> t	12.55								
Operating junction temperature range	T <sub>J</sub>	-55 to +150							°C	
storage temperature range	T <sub>STG</sub>	-55 to +150							°C	

**NOTES:**

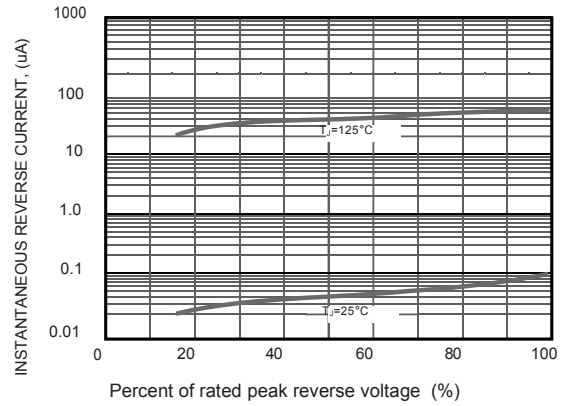
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance Junction to Case, Lead and Ambient.

DN:T21315A0

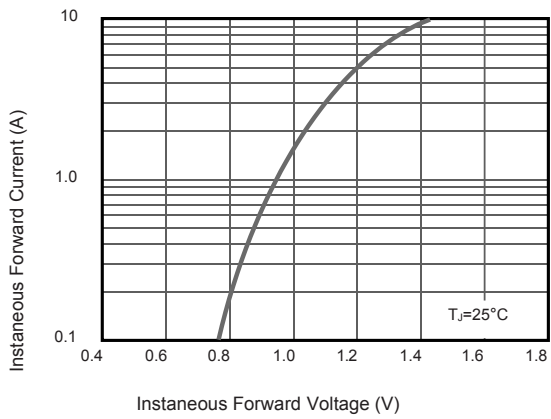
**Fig.1 Forward Current Derating Curve**



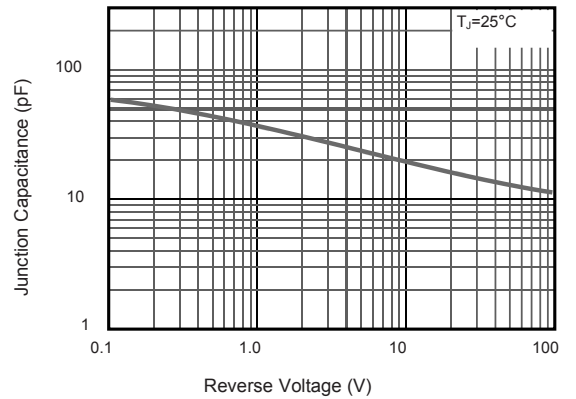
**Fig.2 Typical Instaneous Reverse Characteristics**



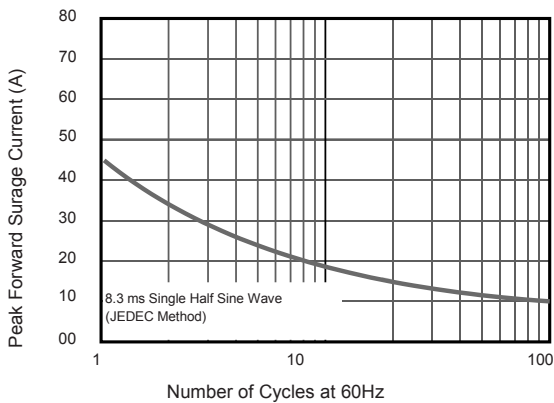
**Fig.3 Typical Forward Characteristic**



**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**

