

## 3.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

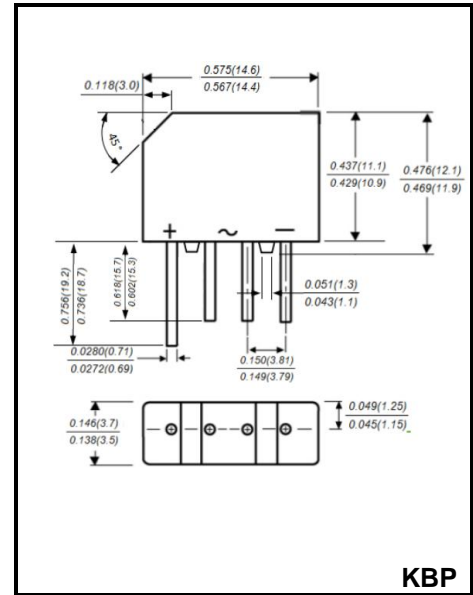
Forward Current – 3.0A

### FEATURES

- ◆ High current capability
- ◆ Low forward voltage drop
- ◆ Glass Passivated Chip Junction
- ◆ Low power loss, high efficiency
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- ◆ Case: KBP
- ◆ Terminals: Solderable per MIL-STD-202, Method 208
- ◆ Approx. Weight: 0.33g / 0.012oz



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

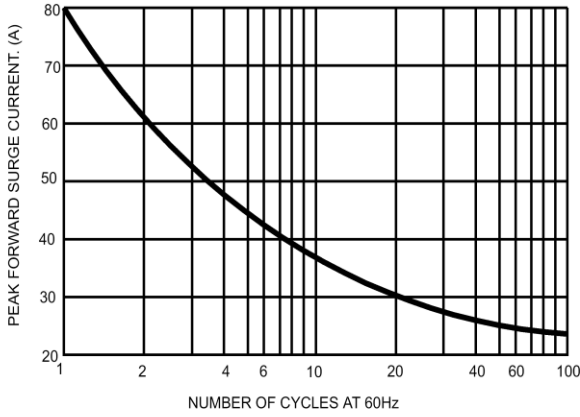
Parameter	Symbols	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current	$I_{(AV)}$	3						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80						A
Forward Voltage per element @ $I_F=3.0A$ and 25°C	$V_F$	1.1						V
Maximum DC Reverse Current @ $T_j=25^\circ C$ at Rated DC Blocking Voltage @ $T_j=125^\circ C$	$I_R$	10 500						$\mu A$
Typical Junction Capacitance <sup>(Note1)</sup>	$C_j$	25						pF
Typical Thermal Resistance <sup>(Note2)</sup>	$R_{\theta JA}$ $R_{\theta JC}$	30/11						°C/W
Operating and Storage Temperature Range	$T_j$ , $T_{stg}$	-55 ~ +150						°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

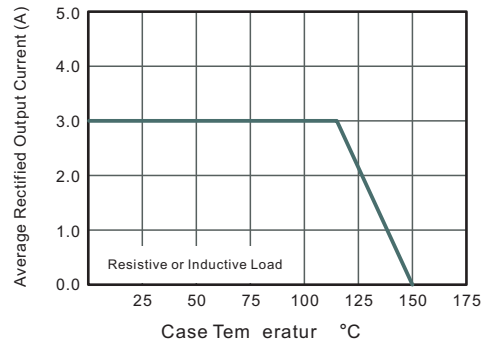
(2) Thermal Resistance Junction to Case, Lead and Ambient.

**RATINGS AND CHARACTERISTIC CURVES**

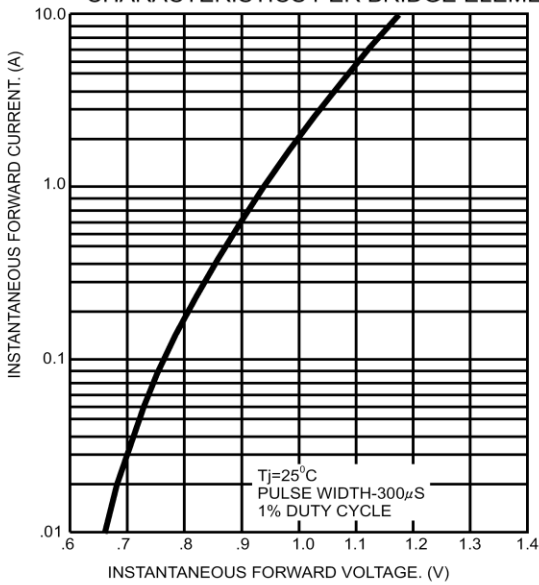
**FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT**



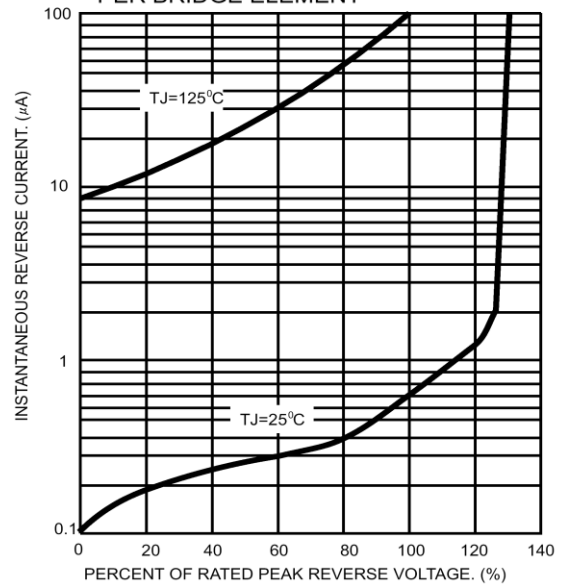
**Fig.2 Average Rectified Output Current Derating Curve**



**FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**

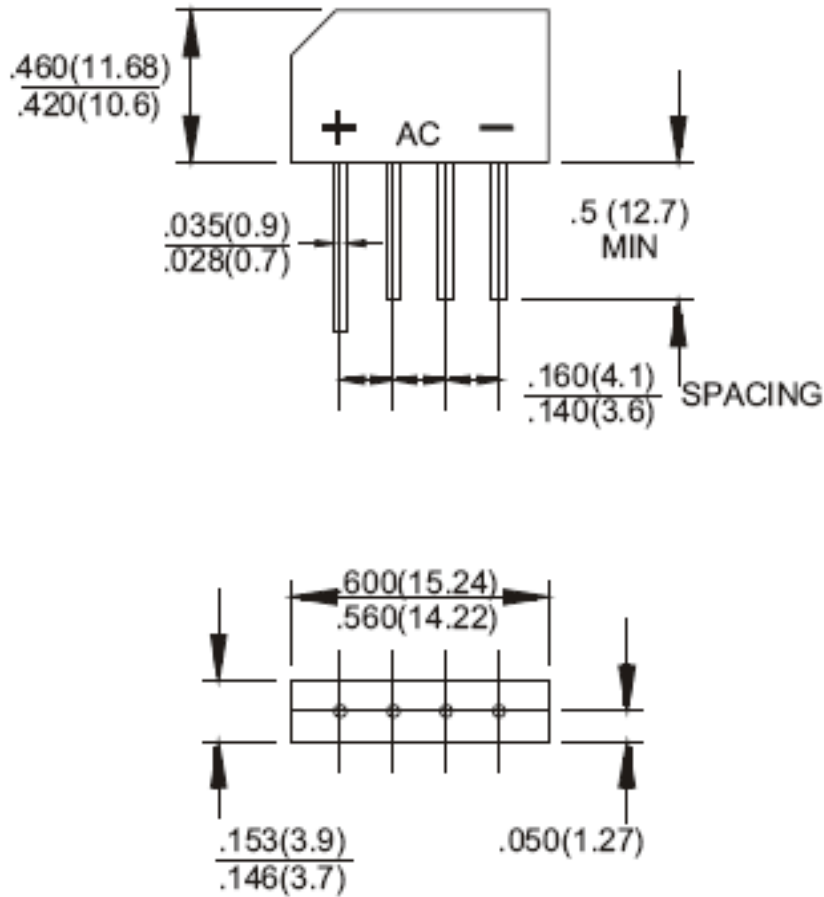


**FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT**



Package Outline

KBP



Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
KBP	BOX	500	EIA-481-1