

### 3.0A GLASS PASSIVATED BRIDGE RECTIFIER

**Reverse Voltage - 100 to 1000 V**

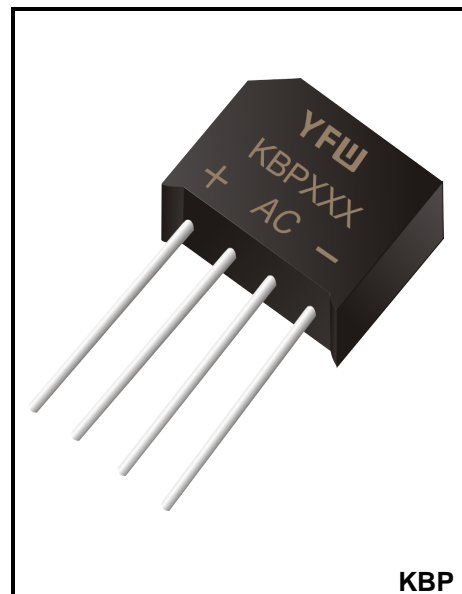
**Forward Current – 3.0A**

#### 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.

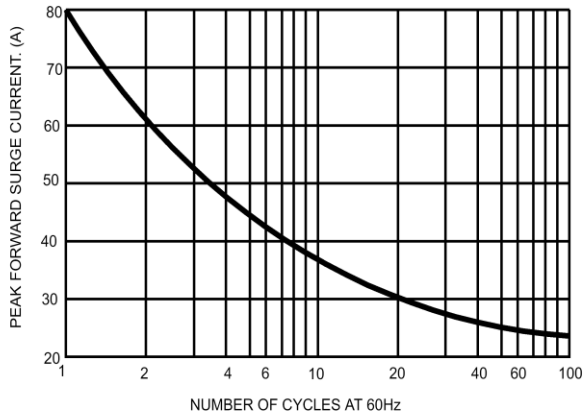
Parameter	Symbols	KBP301-R	KBP302-R	KBP303-R	KBP304-R	KBP305-R	KBP306-R	KBP307-R	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Average Rectified 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

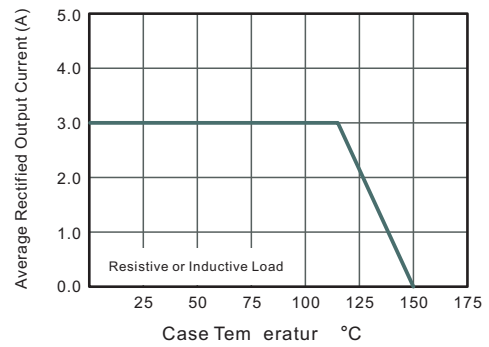
(2) Thermal Resistance Junction to Case, Lead and Ambient.

**Ratings And Characteristic Curves**

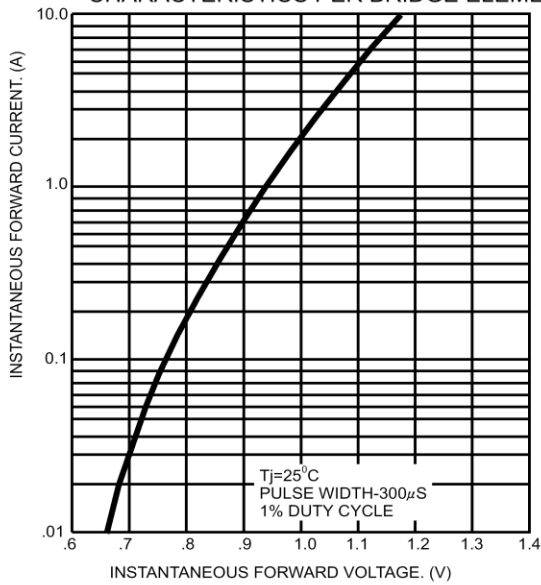
**FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT**



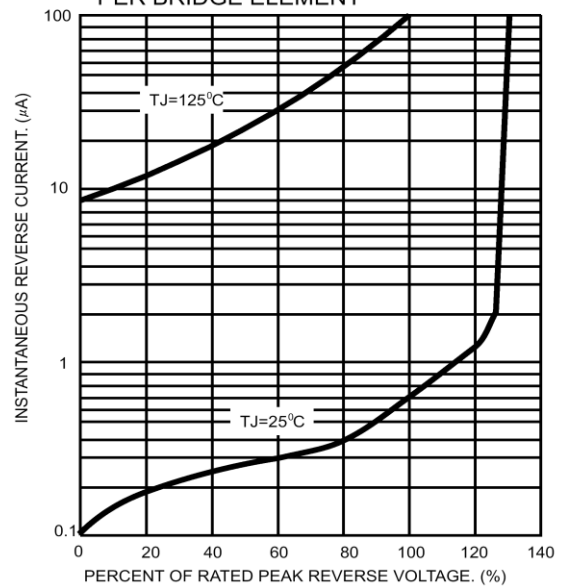
**Fig.2 Average Rectified Output Current Derating Curve**



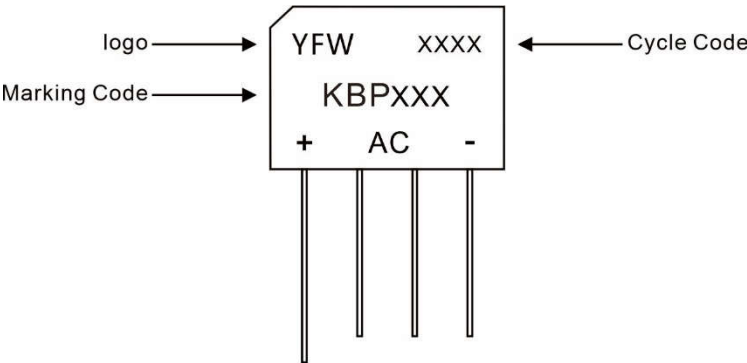
**FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT**



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



**Marking Diagram**



**Ordering information**

Package	Packing Description	Packing Quantity
KBP	bulk	500PCS/Box 5000PCS/Carton

**Package Dimensions**

**KBP**

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	14.35	14.95	0.56	0.59
B	10.96	11.56	0.43	0.46
C	15.20	/	0.60	/
C1	11.68	/	0.46	/
D	3.48	4.08	0.14	0.16
E	3.54	3.94	0.14	0.16
F	0.65	0.85	0.03	0.03
G	0.84	1.24	0.03	0.05

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