

**4.0A GLASS PASSIVATED BRIDGE RECTIFIER**

**Reverse Voltage - 100 to 1000 V**

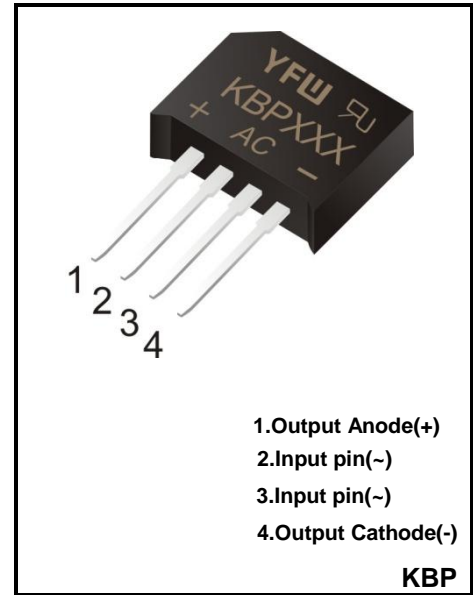
**Forward Current – 4.0A**

**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: 1.52g / 0.05oz



**Maximum Ratings and Electrical characteristics**

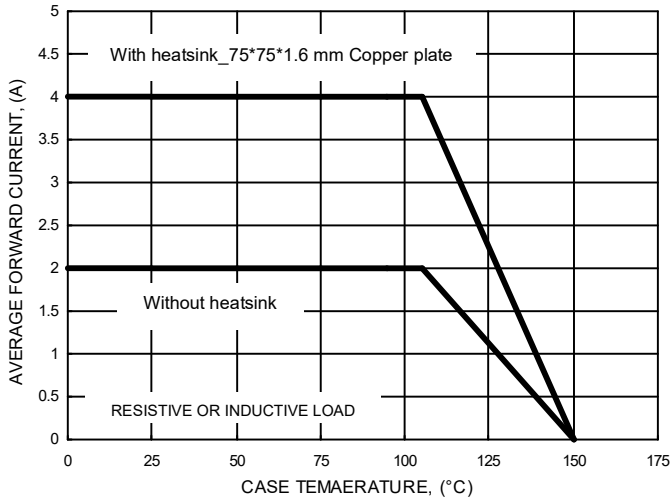
Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	KBP401	KBP402	KBP404	KBP406	KBP408	KBP410	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	$I_{(AV)}$	4						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	95						A
Peak Forward Surge Current @ $T_j = 25\text{ }^\circ\text{C}$ 1.0ms single half sine-wave	$I_{FSM}$	150						A
Forward Voltage per element @ $I_F = 4.0\text{A}$ and $25\text{ }^\circ\text{C}$	$V_F$	1.1						V
Maximum DC Reverse Current @ $T_j = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_j = 125\text{ }^\circ\text{C}$	$I_R$	5 500						$\mu\text{A}$
I2t Rating for Fusing(3ms≤t≤8.3ms)	$I^2t$	26.5						$\text{A}^2\text{S}$
Typical Junction Capacitance <sup>(Note1)</sup>	$C_j$	50						pF
Typical Thermal Resistance <sup>(Note2)</sup>	$R_{\theta JA}/ R_{\theta JC}$	30/10						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^\circ\text{C}$

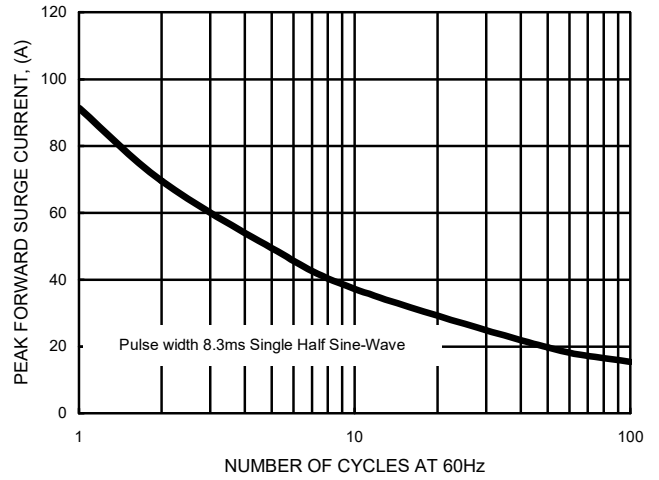
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

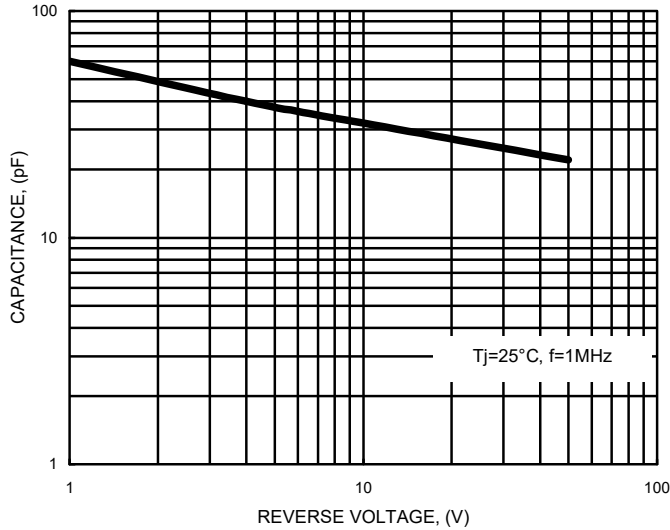
**FIG.1- FORWARD CURRENT DERATING CURVE**



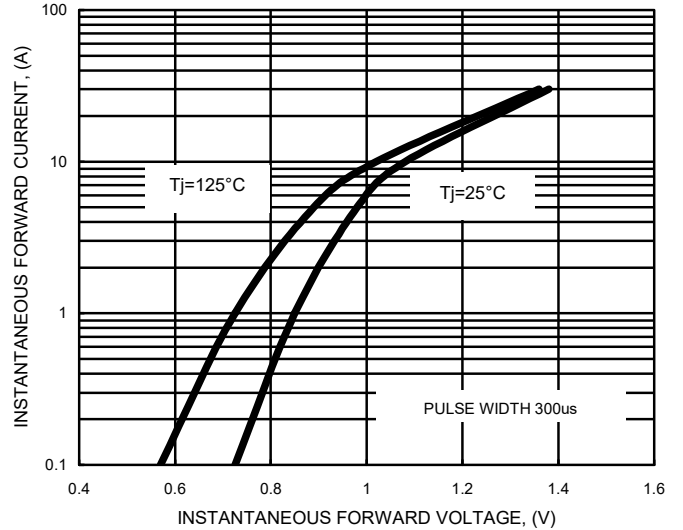
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



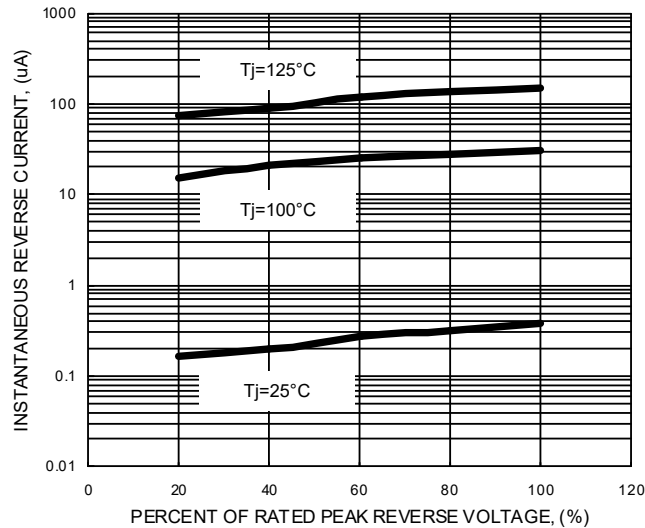
**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**

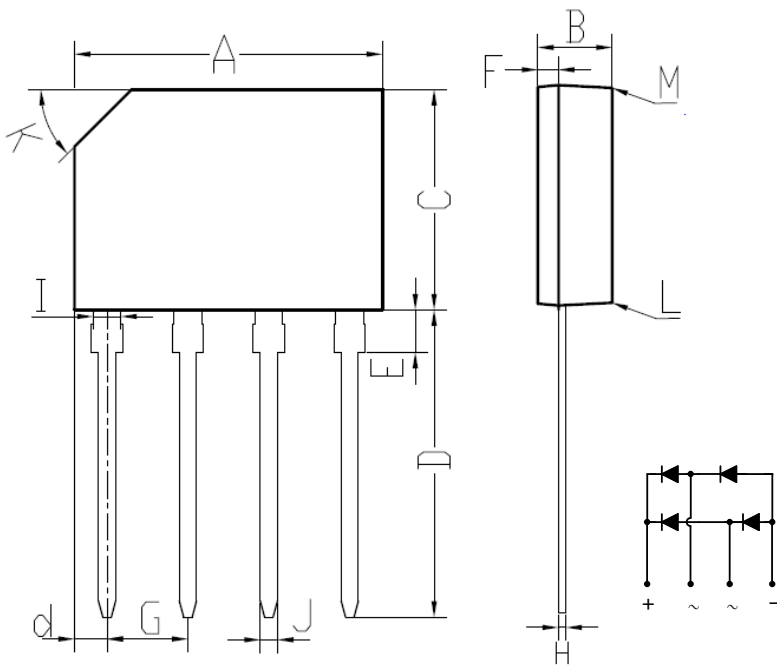


**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**Package Outline**

**KBP**



KBP		
DIM.	MIN.	MAX.
A	14.3	14.60
B	3	3.3
c	10.45	10.75
D	14.41	14.71
d	1.40	1.70
E	2.0	2.30
F	0.90	1.20
G	3.50	3.80
H	0.35	0.37
I	1.43	1.45
J	0.8	0.83
K	2.7x45°(Typ)	
L	#	3°
M	#	2°
All Dimensions in millimeter		

**Summary of Packing Options**

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