

3.0A GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 100 to 1000 V

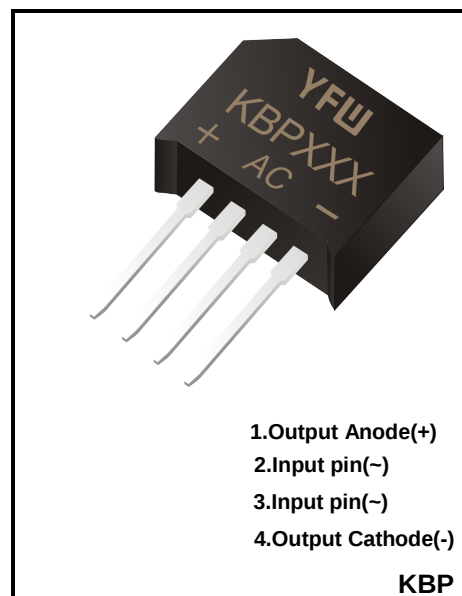
Forward Current – 3.0A

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: 1.52g / 0.05oz



Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	KBP301G	KBP302G	KBP304G	KBP306G	KBP308G	KBP310G	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
Peak Forward Surge Current @ $T_j = 25^\circ C$ 1.0ms single half sine-wave	I_{FSM}	110						A
Forward Voltage per element @ $I_F = 3.0A$ and $25^\circ C$	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	5 500						μA
I^2t Rating for Fusing ($3ms \leq t \leq 8.3ms$)	I^2t	17.5						A^2S
Typical Junction Capacitance (Note1)	C_j	60						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA} / R_{\theta JC}$	30/10						$^\circ C/W$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^\circ C$

(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- FORWARD CURRENT DERATING CURVE

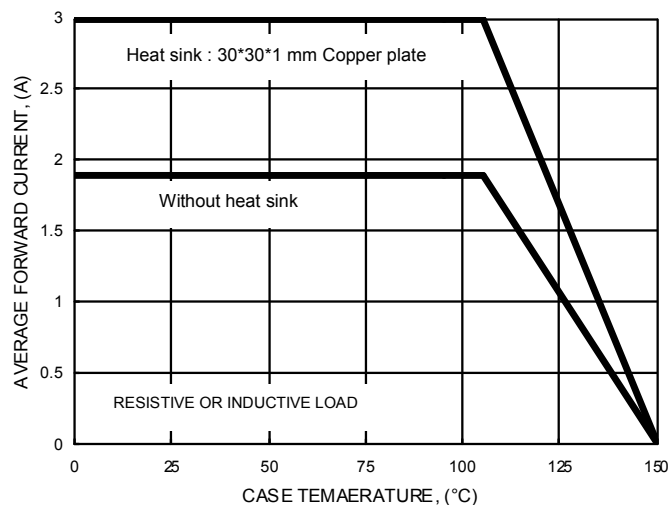


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

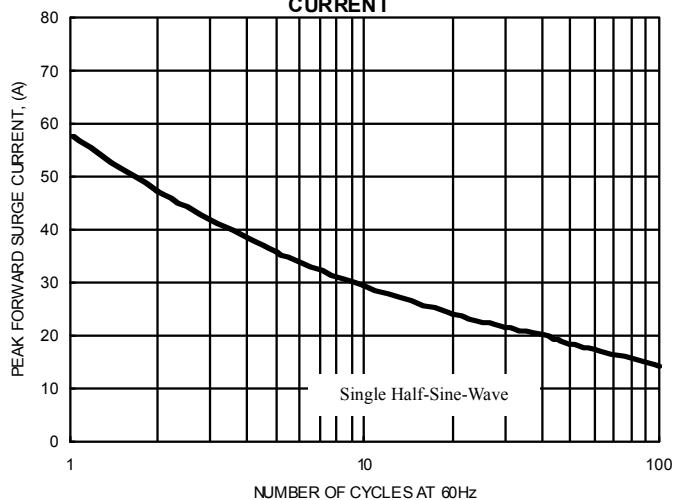


FIG.3- TYPICAL JUNCTION CAPACITANCE

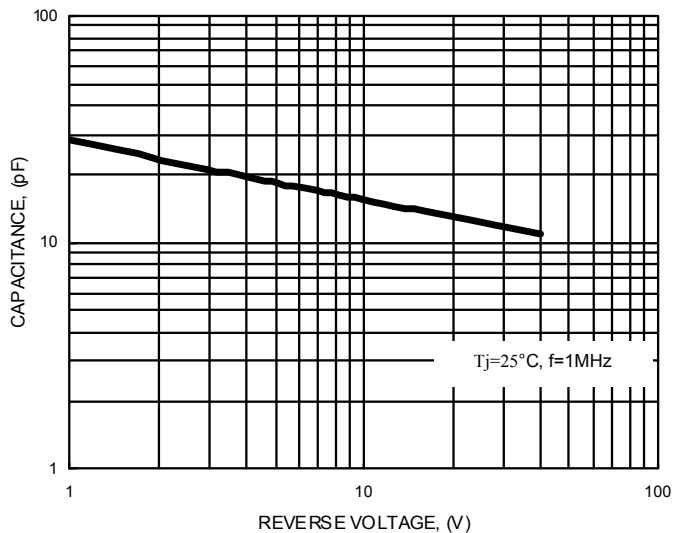


FIG.4- TYPICAL FORWARD CHARACTERISTICS

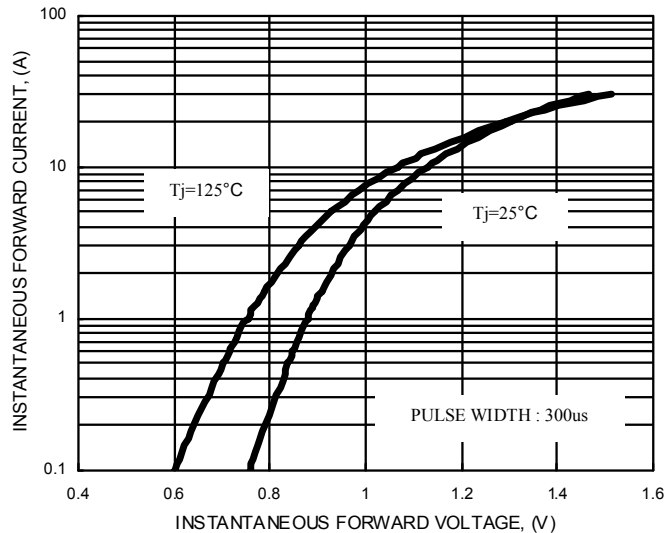
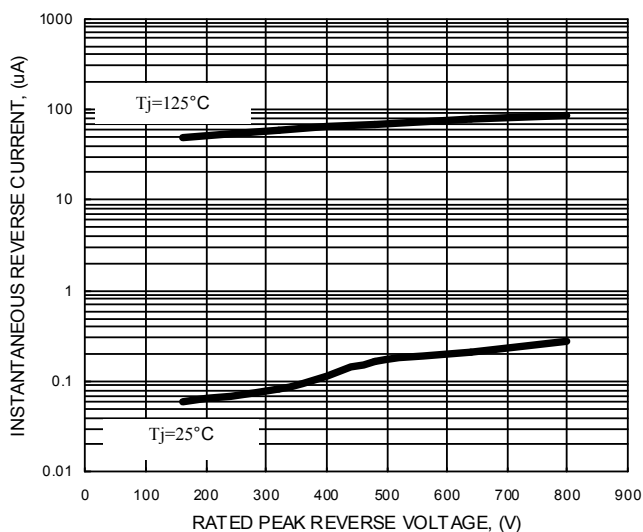
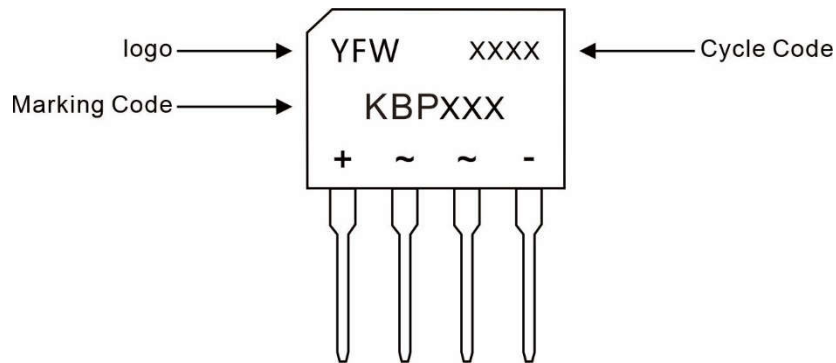


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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	14.3	14.60	0.56	0.57
B	3.0	3.3	0.12	0.13
c	10.45	10.75	0.41	0.42
D	14.41	14.71	0.57	0.58
d	1.40	1.70	0.06	0.07
E	2.0	2.30	0.09	0.09
F	0.90	1.20	0.04	0.05
G	3.50	3.80	0.14	0.15
H	0.35	0.37	0.01	0.01
I	1.43	1.45	0.06	0.06
J	0.8	0.83	0.03	0.03
K	2.7×45° (Typ)		0.11×45° (Typ)	
L	#	3°	#	3°
M	#	2°	#	2°

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