

**3.0A ULTRASOFT RECOVERY BRIDGE RECTIFIER**

**Reverse Voltage – 1000 V**

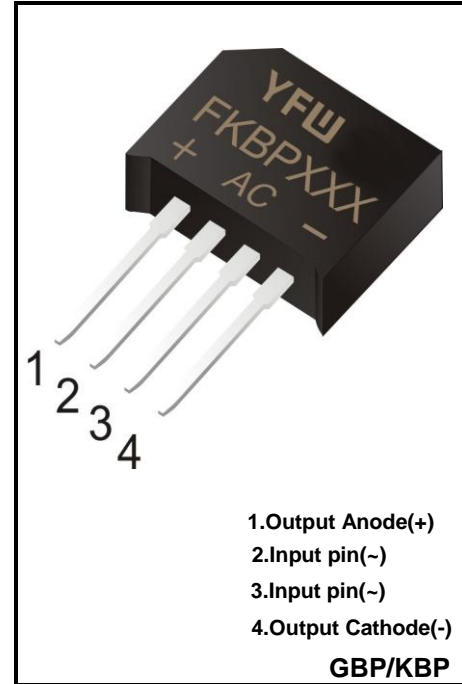
**Forward Current – 3.0A**

**FEATURES**

- ◆Glass passivated chip
- ◆Low Reverse Leakage Current
- ◆High surge current capability
- ◆Case to Terminal Isolation Voltage 2500V

**MECHANICAL DATA**

- ◆Case: GBP/KBP
- ◆Marking/ Polarity: Marked on Body
- ◆About 1.2grams



**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	FKBP310	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS voltage	$V_{RMS}$	700	V
Maximum DC Blocking Voltage	$V_{DC}$	1000	V
Average Forward Output Rectified Current@ $T_a = 120^{\circ}C$	$I_{F(AV)}$	3.0	A
Maximum Forward Voltage at 3.0 A	$V_F$	1.2	V
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	$I_{FSM}$	80	A
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 500	$\mu A$
Maximum reverse recovery time (NOTE 1)	$T_{rr}$	500	NS
$I^2t$ Rating for Fusing( $1ms \leq t \leq 8.3ms$ )	$I^2t$	26.5	A <sup>2</sup> S
Rms isolation voltage from case to leads	$V_{isol}$	2500	V
Typical Junction Capacitance <sup>(Note1)</sup>	$C_j$	23	pF
Maximum thermal resistance per leg	$R_{\theta JC}$	10	$^{\circ}C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^{\circ}C$

**Note:**

- (1) Junction to case with heatsink
- (2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

**Characteristics(Typical)**

Fig 1-forwardCurrent derating Curve

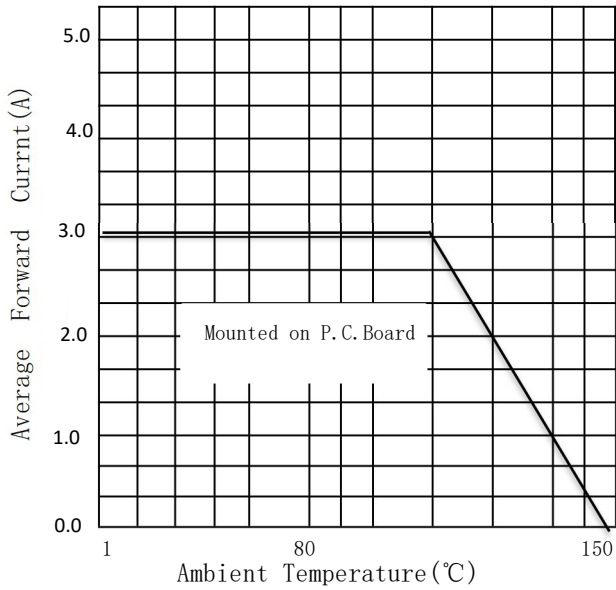


Fig.2-Maximum Non-Repetitive Surge Current

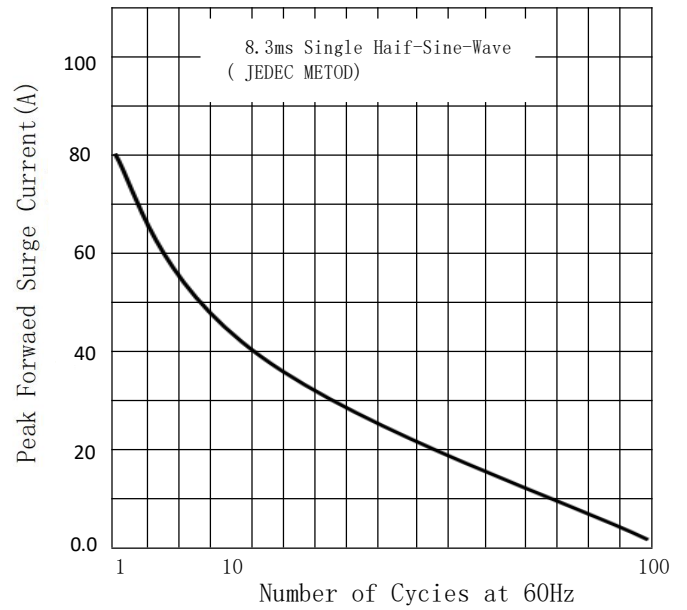


Fig.3-Typical Reverse Characteristics

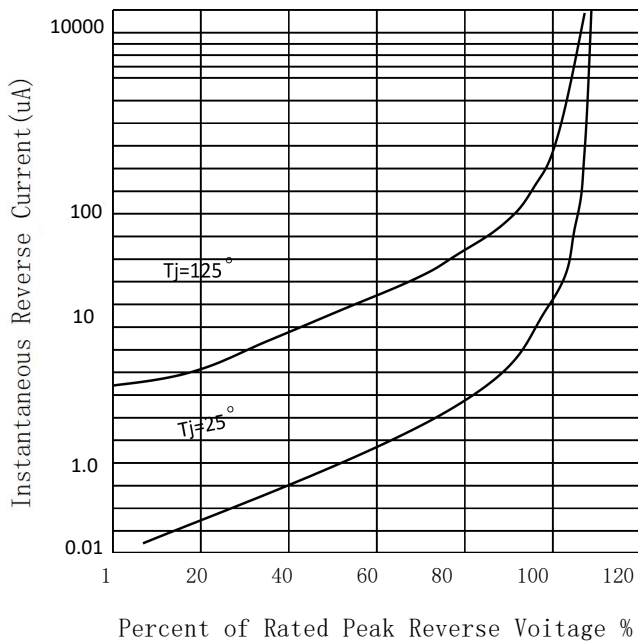
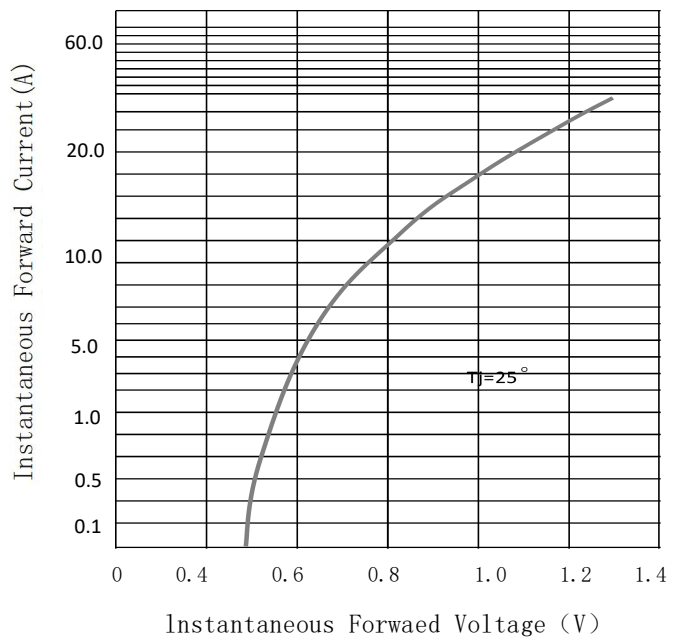
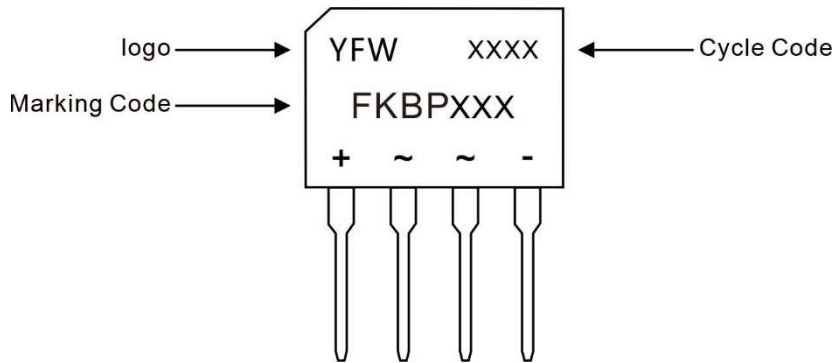


Fig.4-Typical Forward Characteristics



**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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