

**4.0A ULTRASOFT RECOVERY BRIDGE RECTIFIER Reverse Voltage –1000 V Forward Current – 4.0A**
**FEATURES**

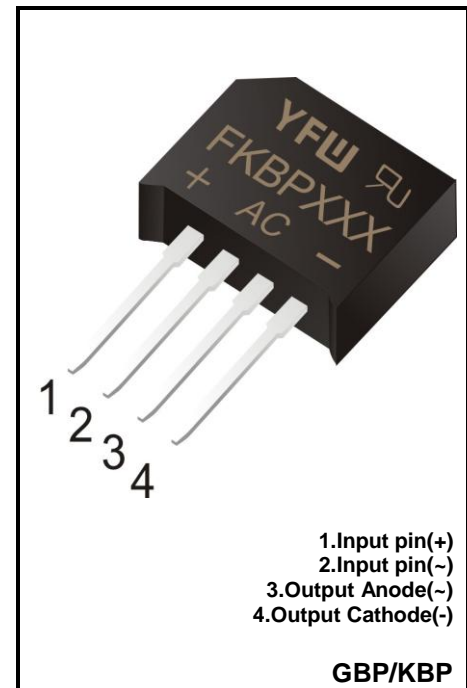
- ◆Ultrasoft recovery
- ◆LOW  $I_{RRM}$ , LOW  $V_F$ , LOW  $V_{RRM}$
- ◆Glass Passivated Chip Junction
- ◆Special frame design for heat dissipation
- ◆Lead free in comply with EU RoHS 2011/65/EU directives


**BENEFITS**

- ◆Reduced EMI
- ◆Reduced Power loss and switching transistor
- ◆Reduced snubbing

**MECHANICAL DATA**

- ◆Case: GBP/KBP
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 1.52g /0.05oz


**Maximum Ratings and Electrical characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

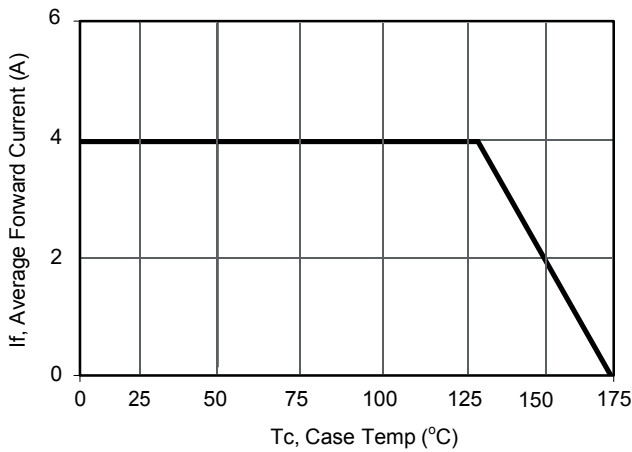
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	FKBP410	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 Rectified Output Current	$I_o$	4.0	A
Reverse Recovery Time. $I_F=0.5A,I_R=1A,IRR=0.25A$	$T_{rr}$	10	uS
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	$I_{FSM}$	110	A
$I^2t$ Rating for Fusing( $1ms \leq t \leq 10ms$ )	$I^2t$	93	A <sup>2</sup> S
Maximum Forward Voltage at 2.0 A	$V_F$	1.0	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 100	uA
Typical Junction Capacitance (Note <sup>1</sup> )	$C_j$	40	pF
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175	°C

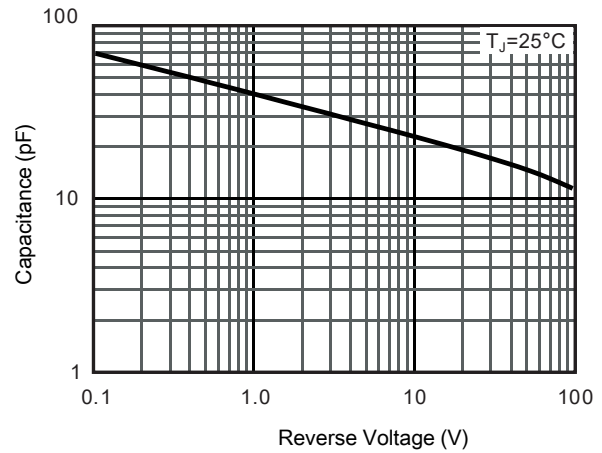
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad.

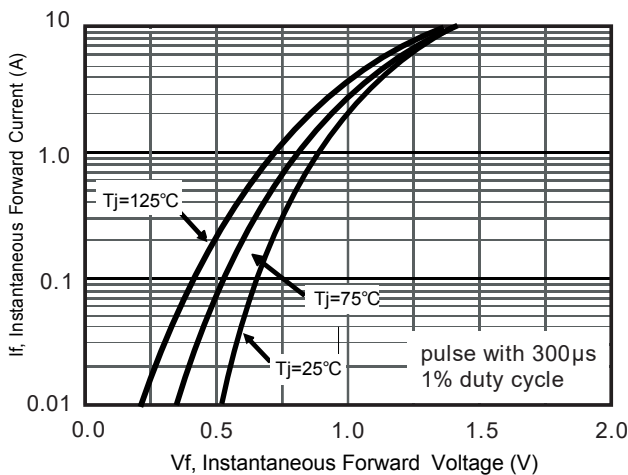
**RATINGS AND CHARACTERISTICS CURVES** (TA = 25 °C unless otherwise noted)



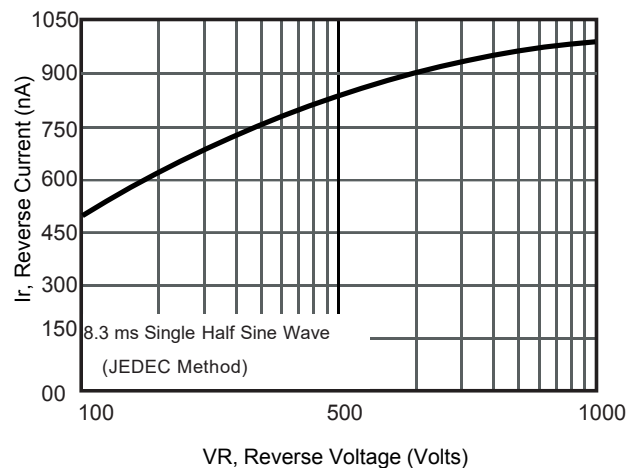
Current Derating, Case



Typical Junction Capacitance



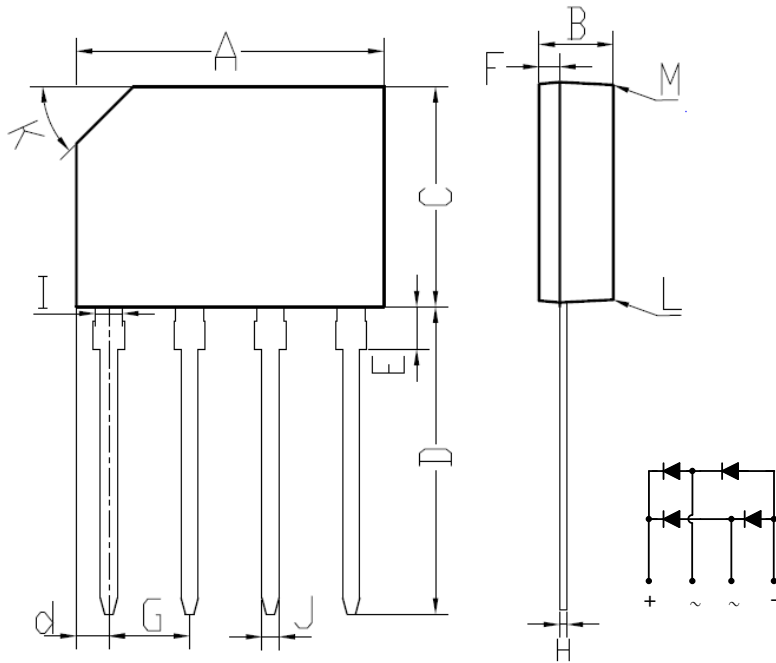
Typical Forward Voltage



Typical Reverse Current

Package Outline

**KBP**



KBP		
DIM.	MIN.	MAX.
A	14.25	14.75
B	3.35	3.65
C	10.20	10.60
D	14.25	14.73
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.56	4.06
H	0.35	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7 x 45° (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