



**THE DATASHEET OF  
KBP410GTB**



## KBP4005G THRU KBP410G SINGLE PHASE 4.0AMP GLASS PASSIVATED BRIDGE RECTIFIER

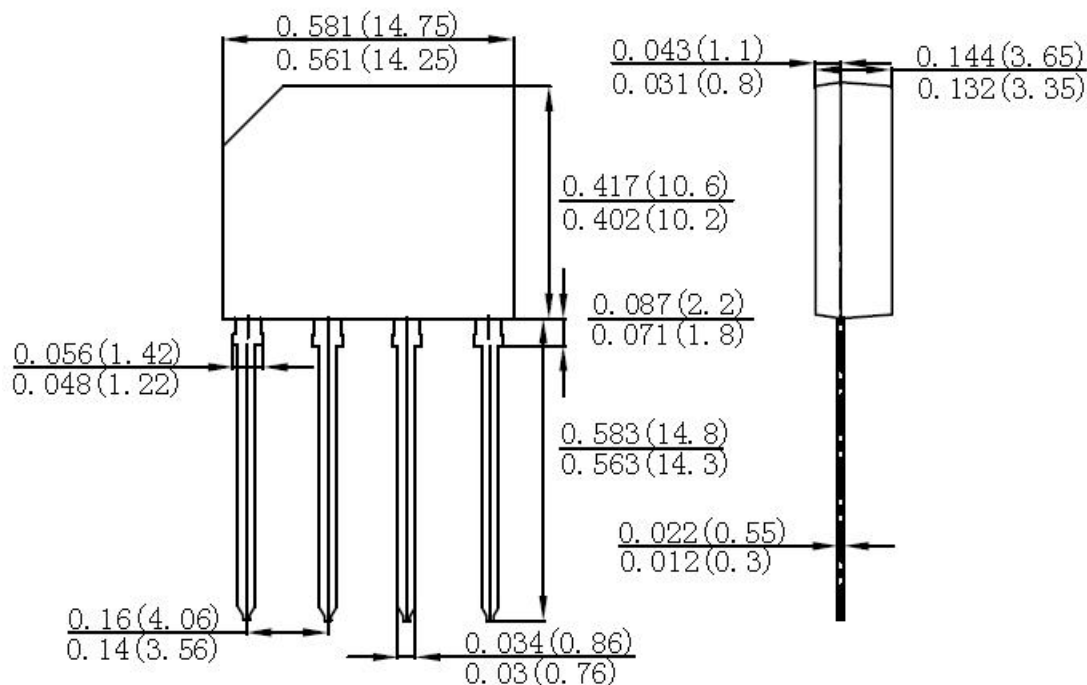
### Features:

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

### Mechanical Data:

- Case: KBP, molded plastic
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Lead Free: For RoHS / Lead Free Version

### Mechanical Dimensions: In mm/Inches



**KBP**

### MARKING, MOLDING RESIN

Marking for Type Number, 1<sup>st</sup> row SSG YYWWL, 2<sup>nd</sup> row Type Number

Where YY is the manufacture year

WW is the manufacture week code

L is the wafer's Lot Number

**Maximum Ratings and Electrical Characteristics** Rating at 25°C ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

**Maximum Ratings:**

Type number	Symbol	KBP 4005G	KBP 401G	KBP 402G	KBP 404G	KBP 406G	KBP 408G	KBP 410G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A=50^\circ\text{C}$	$I_o$	4.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	120							A

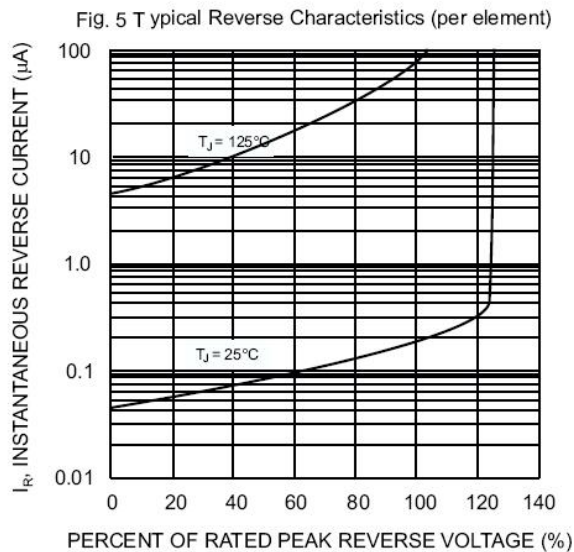
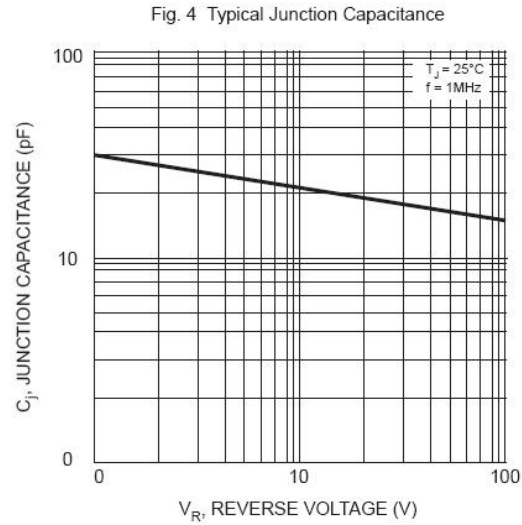
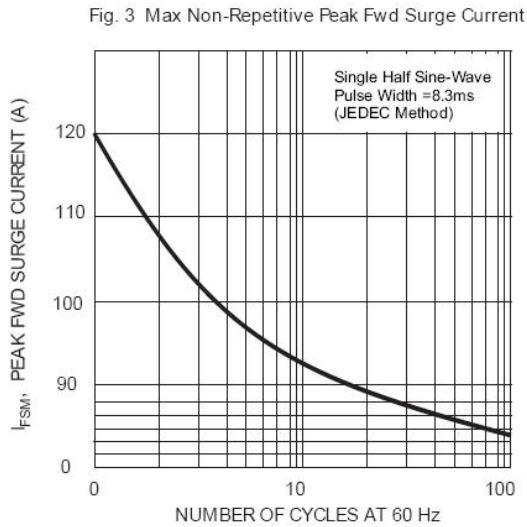
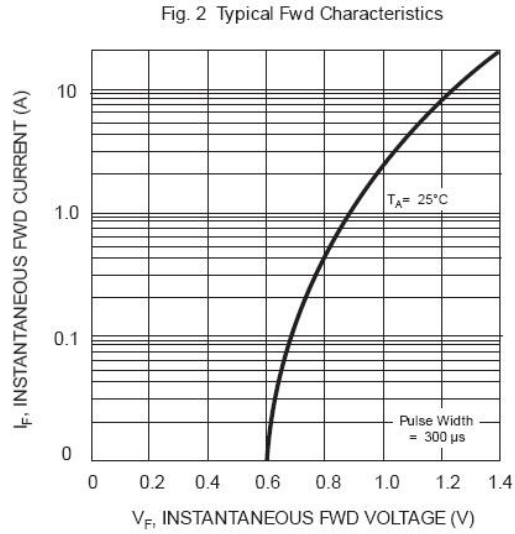
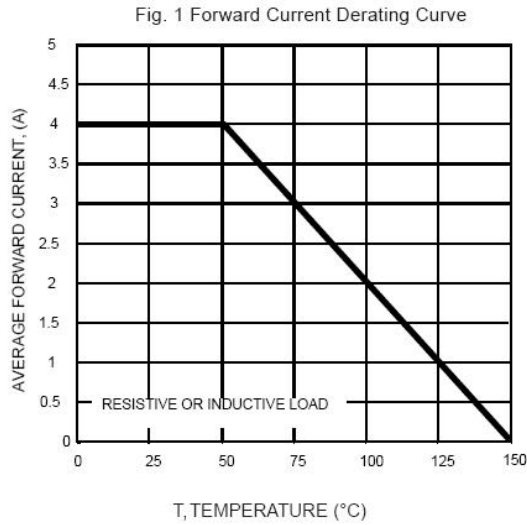
**Electrical Characteristics:**

Type number	Symbol	KBP 4005G	KBP 401G	KBP 402G	KBP 404G	KBP 406G	KBP 408G	KBP 410G	Unit
Forward Voltage per element @ $I_F=4.0\text{A}$	$V_F$	1.1							V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	5.0 500							$\mu\text{A}$

**Thermal-Mechanical Specifications:**

Type number	Symbol	KBP 4005G	KBP 401G	KBP 402G	KBP 404G	KBP 406G	KBP 408G	KBP 410G	Unit
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	40							°C/W
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	20							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150							°C
Case Style		KBP							

Note:1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.





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