

■ Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

■ Applications

- General purpose use in AC/DC bridge full wave rectification

■ Mechanical Data

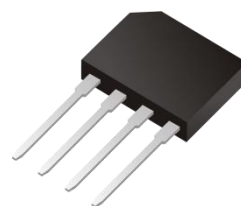
- Case: GBP
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



Reverse Voltage
50-1000 V

Forward Current
3.0 A max

Appearance Image



■ Marking

- KBP3xx(005~10)

■ Maximum Ratings @ Ta = 25°C unless otherwise noted

PARAMETER	SYMBOL	UNIT	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Maximum average output current@60Hz sine wave, resistance load	$I_{F(AV)}$	A	3.0						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	80						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	160						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	Pt	A ² S	26.56						
Storage temperature	T_{stg}	°C	-55~+150						
Junction temperature	T_j	°C	-55~+150						

■ Electrical Characteristics @ Ta = 25°C unless otherwise noted

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310
Maximum instantaneous forward voltage	$I_F=1.5A$	V_F	V	1.0						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$, Tj=25°C	I_R	μA	5						
	$V_R=V_{DC}$, Tj=100°C	I_R		500						

■ Characteristic Curve (Typical)

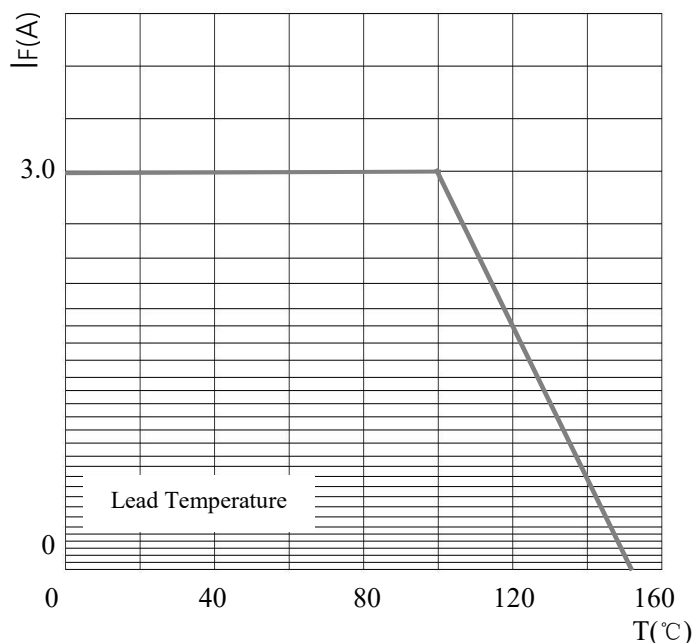


FIG1. Derating Curve For Output Rectified Current

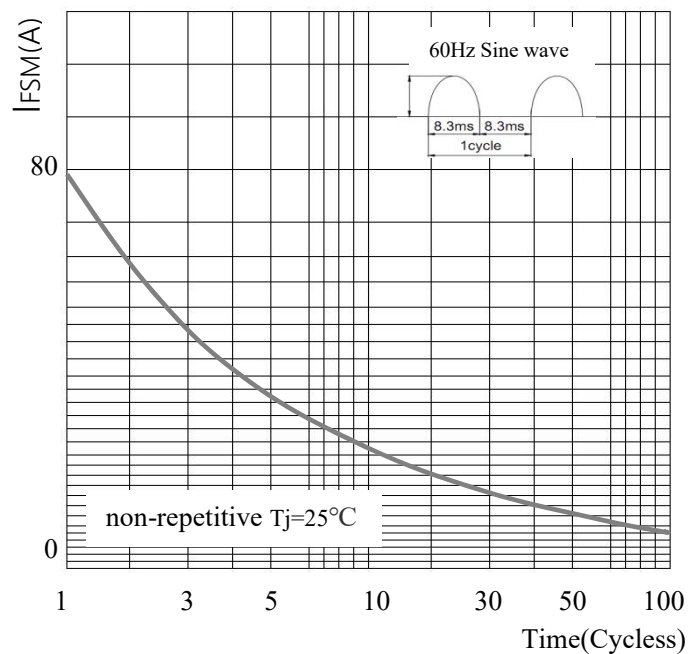


FIG2. Surge Forward Current Capability

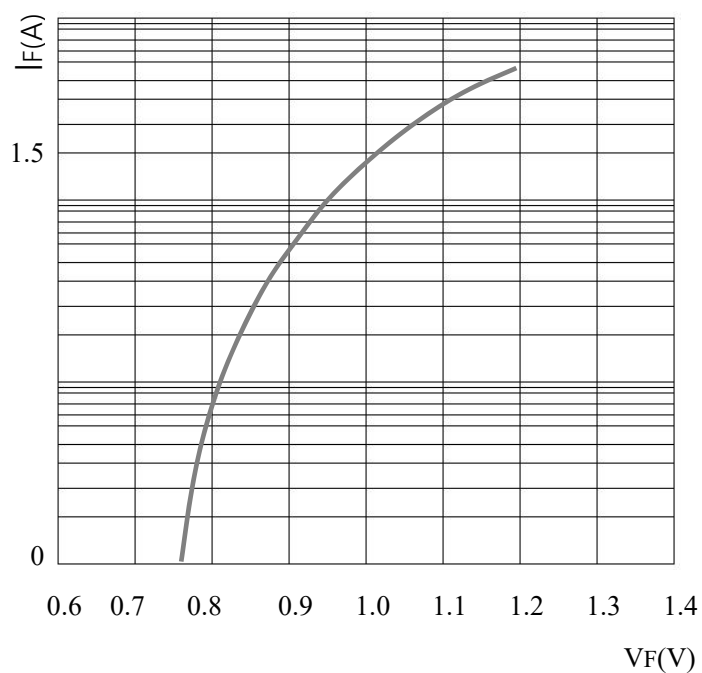


FIG3. Typical Forward Characteristics

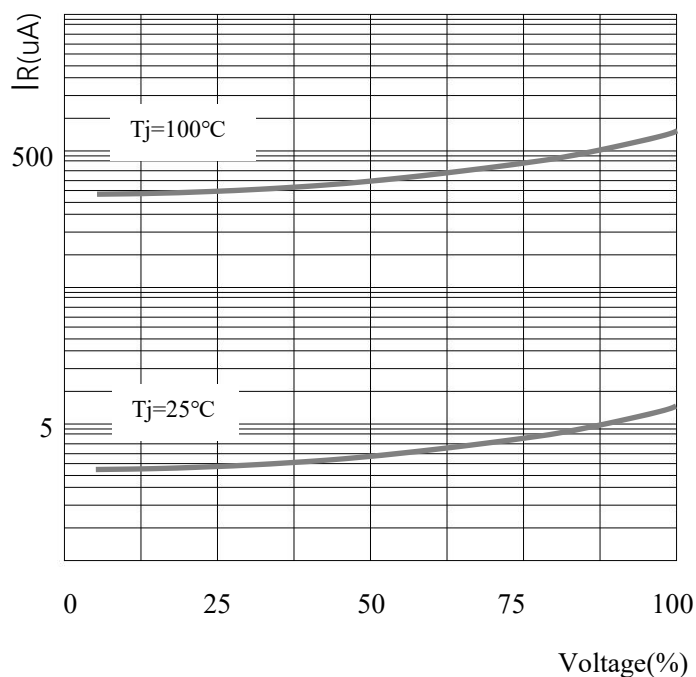
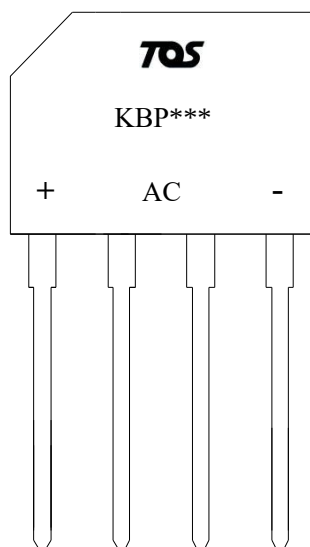


FIG4. Typical Reverse Characteristics

■ Marking and packet information

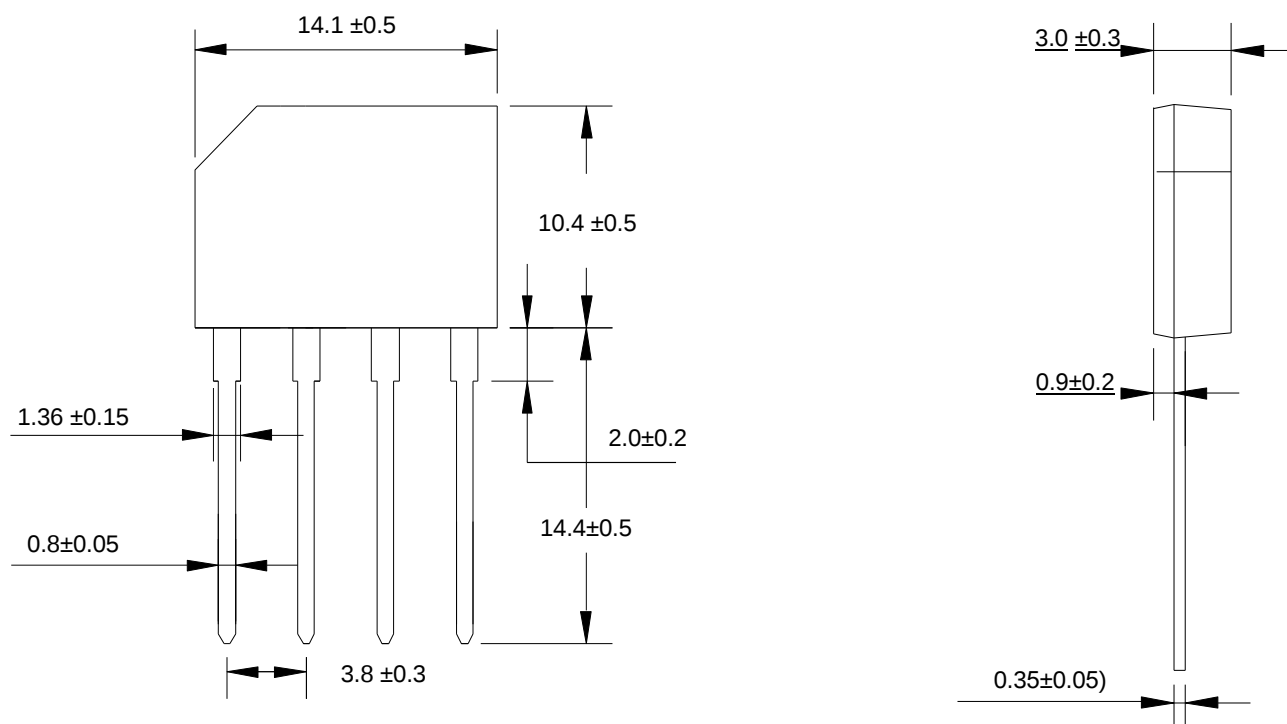


GBP*** : Marking Model

TOS : Brand Logo

Packaging information	
每盒	500PCS
每箱	5000PCS
脚长定制	支持

■ GBP Package outline dimensions



Dimensions in millimeters

■ Notice

XILONG reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein.
xilong does not assume any liability arising out of the application or use of any product described herein.