

■ **Features**

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

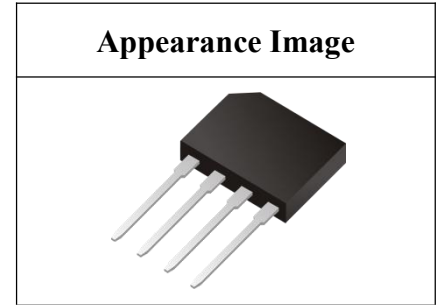
<b>Reverse Voltage</b> 50-1000 V
<b>Forward Current</b> 3.0 A max

■ **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



■ **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	60						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	120						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	$I^2t$	A <sup>2</sup> S	14.94						
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	$V_R=V_{DC}, T_j=25°C$	$I_R$	μA	5						
	$V_R=V_{DC}, T_j=100°C$	$I_R$		500						

■ Characteristic Curve (Typical)

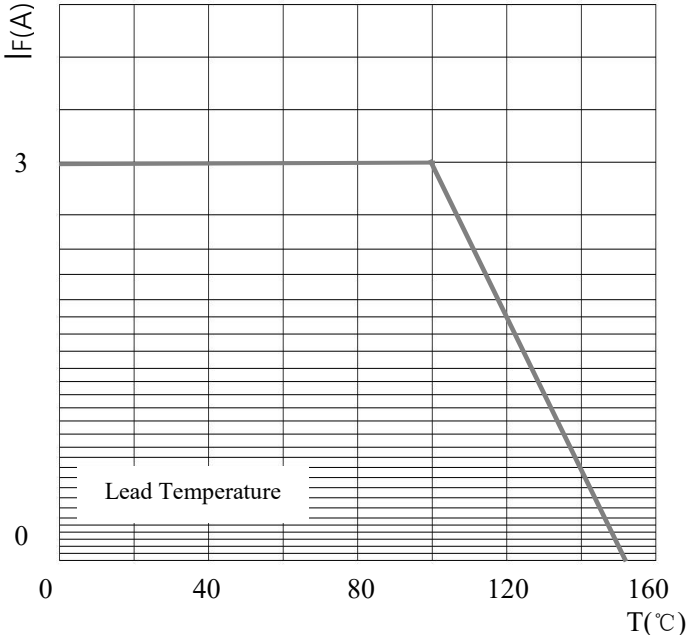


FIG1. Derating Curve For Output Rectified Current

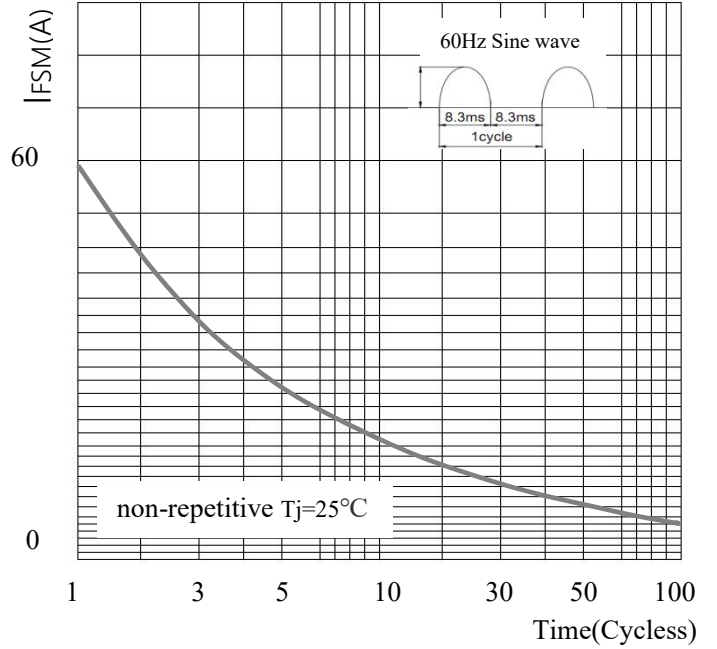


FIG2. Surge Forward Current Capability

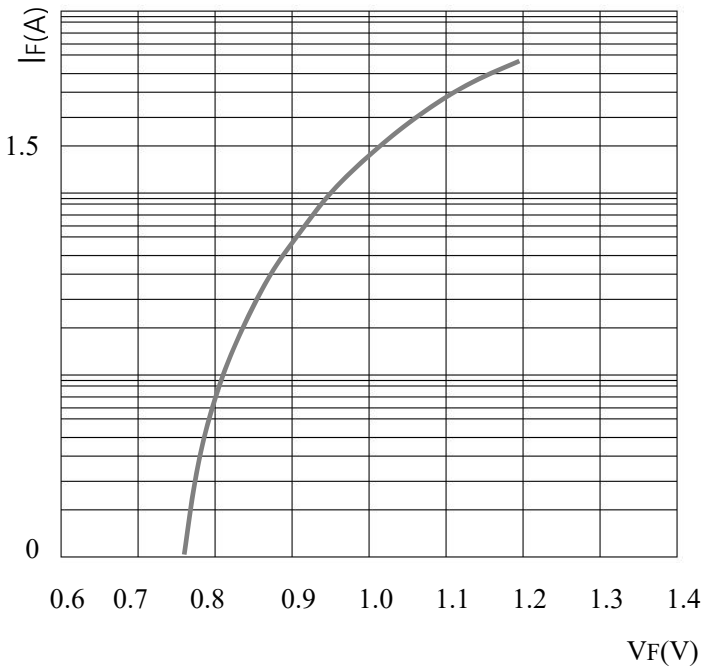


FIG3. Typical Forward Characteristics

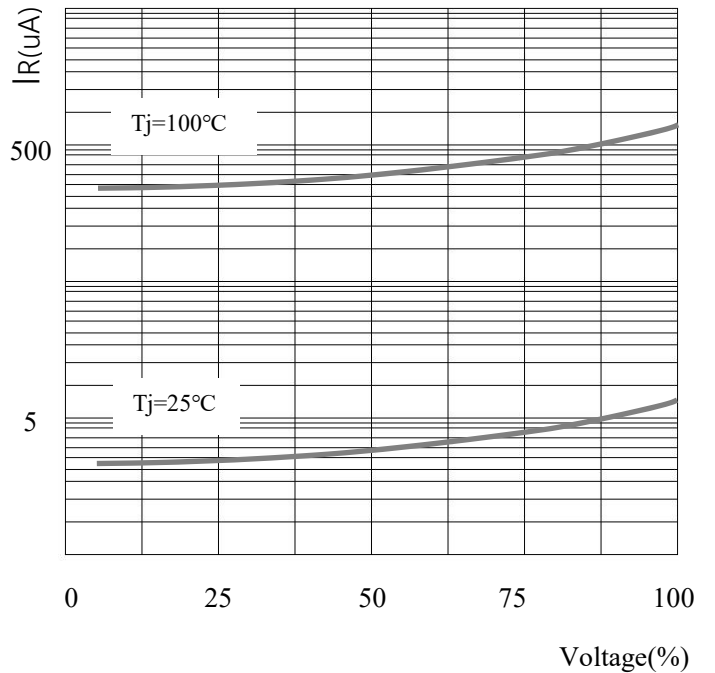
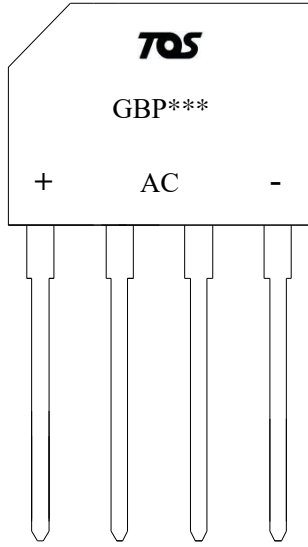


FIG4. Typical Reverse Characteristics

■ **Marking and packet information**

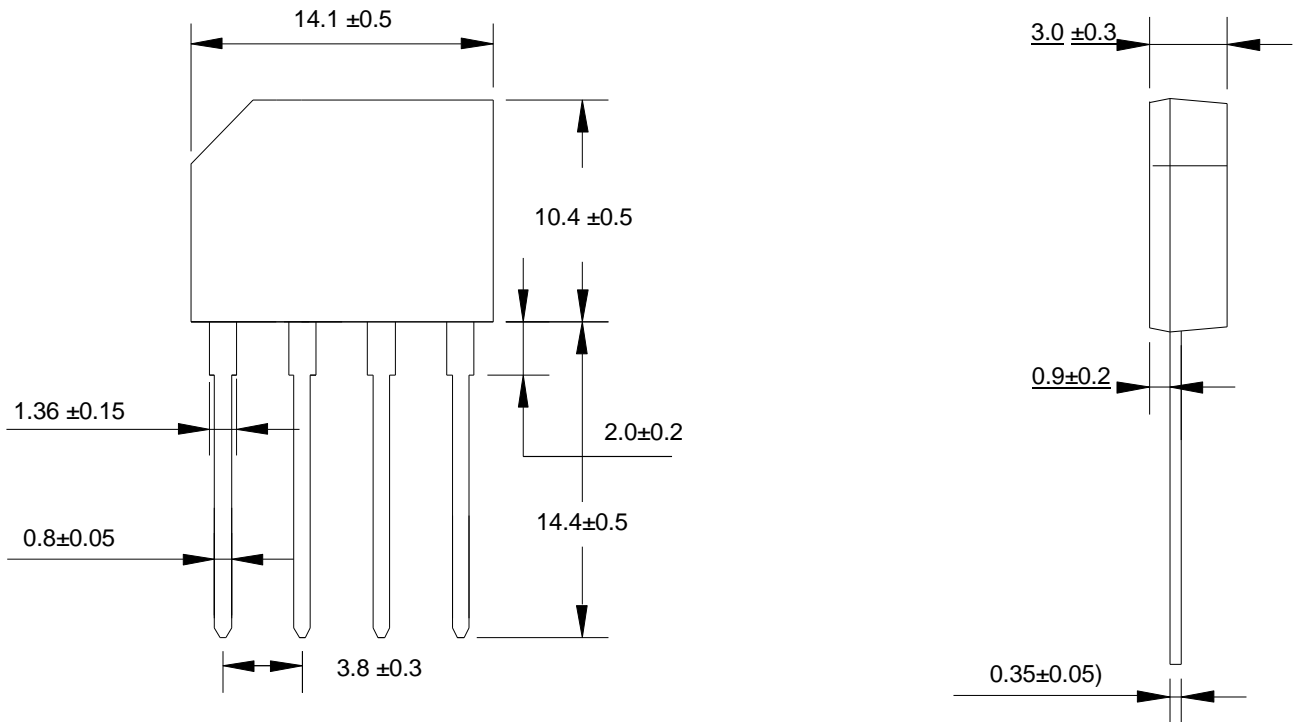


GBP\*\*\* : Marking Model

**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**

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