KBP5005 THRU KBP510

GBP Plastic-Encapsulate Bridge Rectifier

Reverse Voltage
50-1000 V

Forward Current
5.0 A max

Features

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

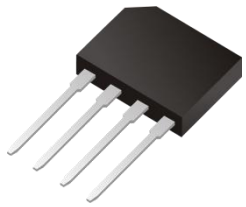
Applications

- 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

Appearance Image



Marking

- KBP5xx(005~10)

Maximum Ratings @ Ta = 25°C unless otherwise noted

PARAMETER	SYMBOL	UNIT	KBP5005	KBP501	KBP502	KBP504	KBP506	KBP508	KBP510
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	5.0						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	120						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	240						
Current squared time @1ms≤t<8.3ms Tj=25°C，Rating of per diode	I^2t	A^2S	59.76						
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	KBP5005	KBP501	KBP502	KBP504	KBP506	KBP508	KBP510
Maximum instantaneous forward voltage	I_F=2.5A	V_F	V	1.0						
Maximum DC reverse currentat 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)

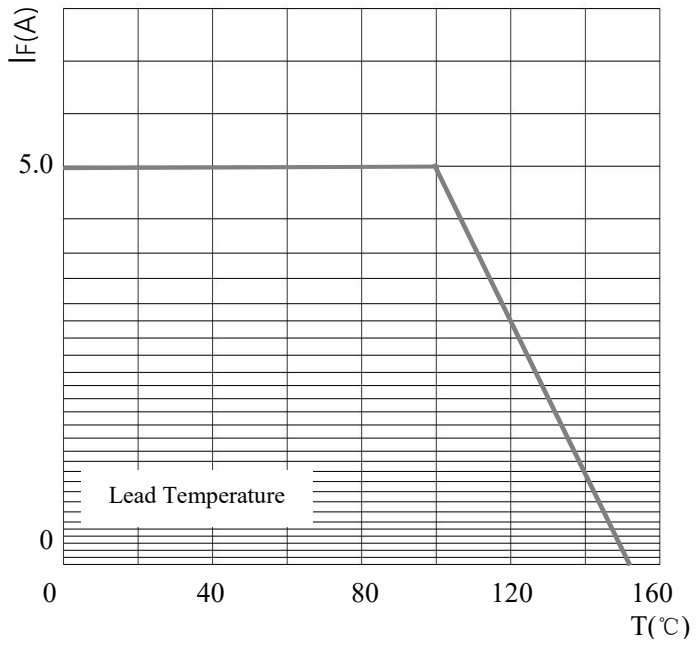


FIG1.Derating Curve For Output Rectified Current

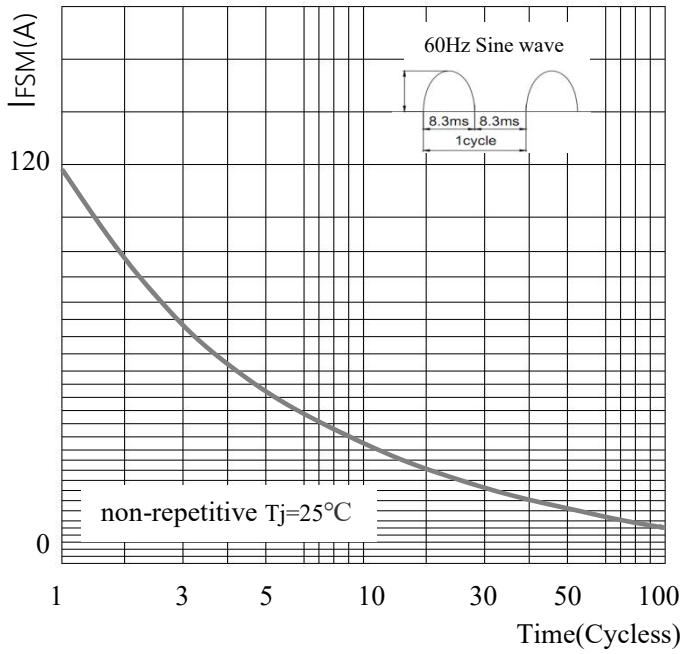


FIG2. Surge Forward Current Capability

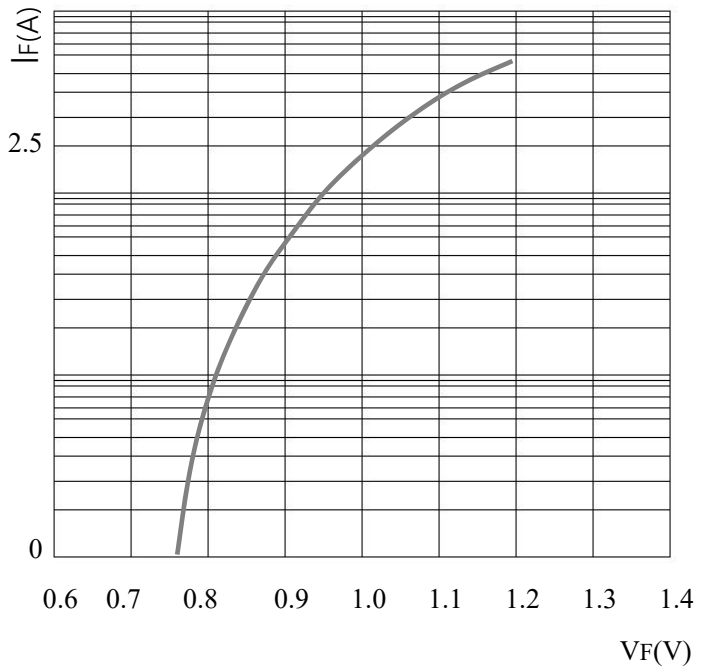


FIG3.Typical Forward Characteristics

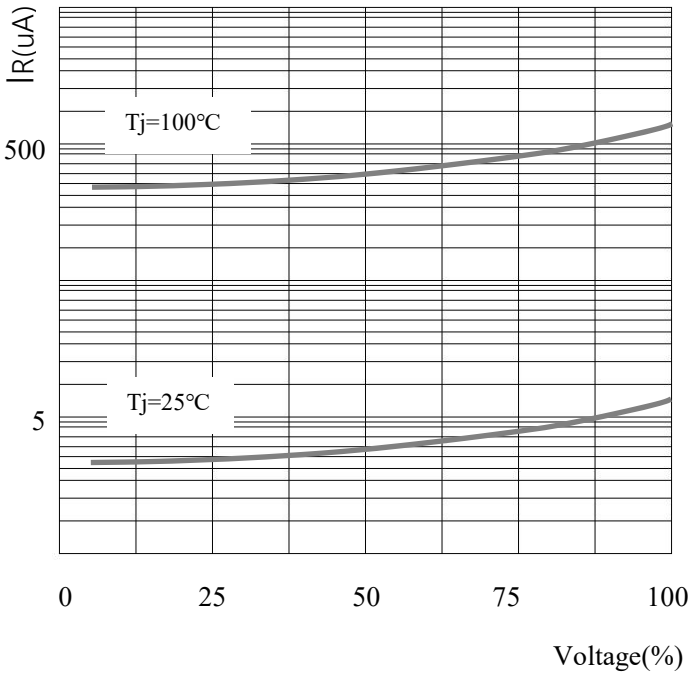
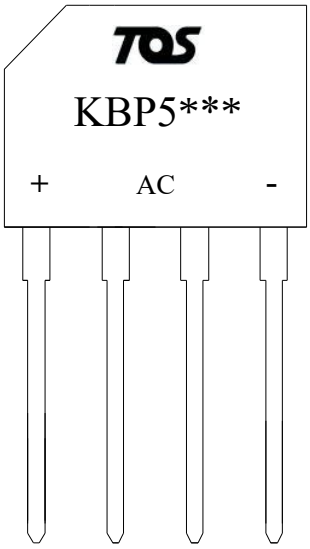


FIG4.Typical Reverse Characteristics

Marking and packet information

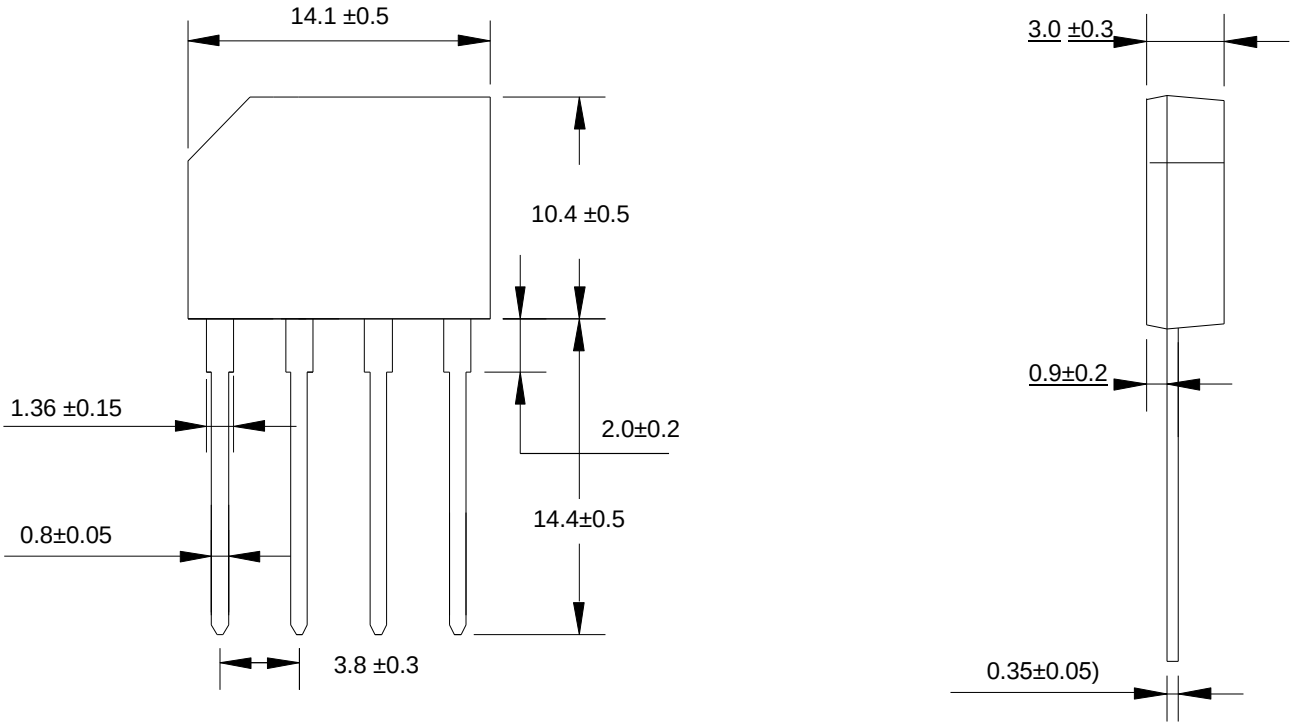


Packaging information	
Box Quantity	500PCS
Carton Quantity	5000PCS
Identification	

Provide lead pin length dimensions and support customization services

定制服务：提供引线脚长尺寸，支持长度定制

GBP Package outline dimensions



Dimensions in milimeters

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