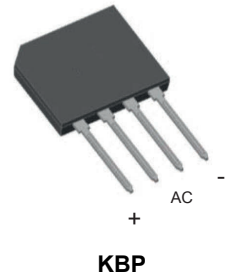


GSKBP3005 thru GSKBP310

General Purpose Bridge Rectifiers
Reverse Voltage 50V to 1000V Forward Current 3A

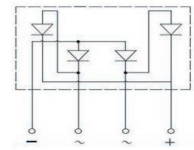
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



Mechanical Data

- Case: KBP molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any



Schematic Diagram

Applications

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment and telecommunication applications.

Maximum Ratings and Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameters		Symbol	GSKBP 3005	GSKBP 301	GSKBP 302	GSKBP 304	GSKBP 306	GSKBP 308	GSKBP 310	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current, (See Fig 2)		I _{F(AV)}	3.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load		I _{FSM}	90							A
Rating for Fusing (t=8.3ms)		I ² t	33.62							A ² S
Maximum Instantaneous Forward Voltage at 1.5A DC		V _F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J =25°C	I _R	5.0							μA
	T _J =125°C		100							μA
Typical Junction Capacitance ¹		C _J	27							pF
Typical Thermal Resistance, Junction to Ambient ²		R _{θJA}	45							°C/W
Typical Thermal Resistance, Junction to Case ²		R _{θJC}	5							°C/W
Operating and Storage Temperature Range		T _J , T _{STG}	-55 to +150							°C

Notes:

1. Measured at 1MHz and applied reverse voltage of 4.0 Volts.
2. Device mounted on 30mm x 30mm x 1mm Cu plate heatsink.

Ratings and Characteristics Curves

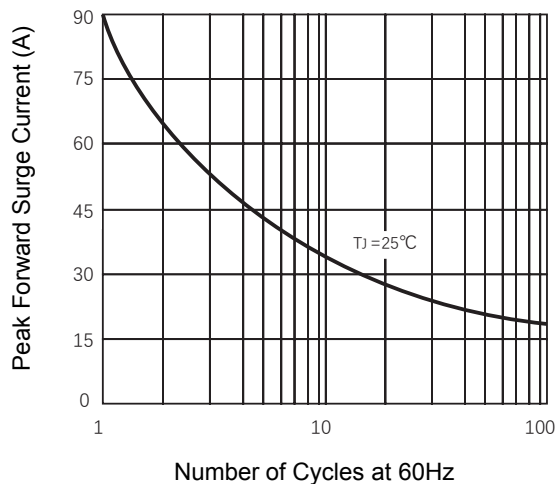


Figure 1. Maximum Forward Surge Current

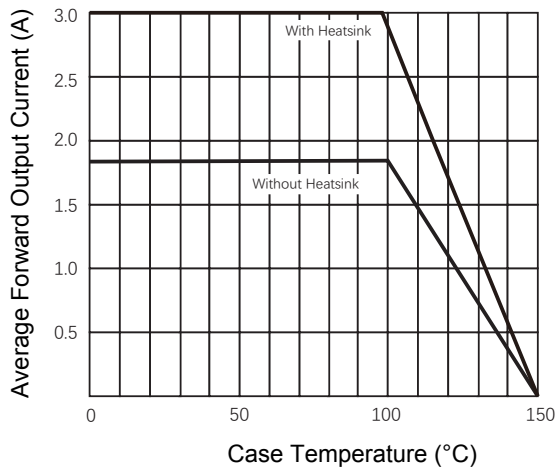


Figure 2. Forward Current Derating Curve

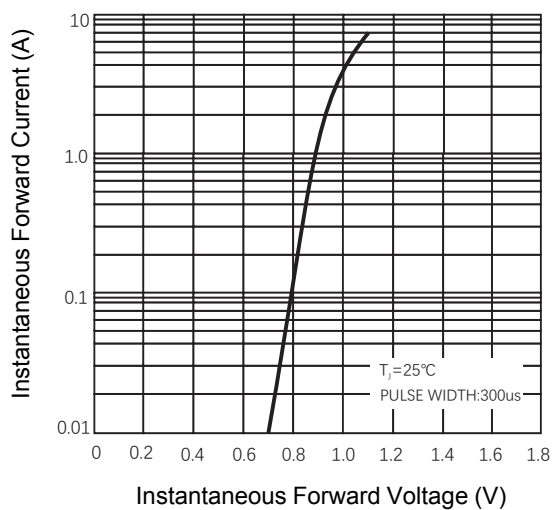


Figure 3. Typical Forward Characteristics

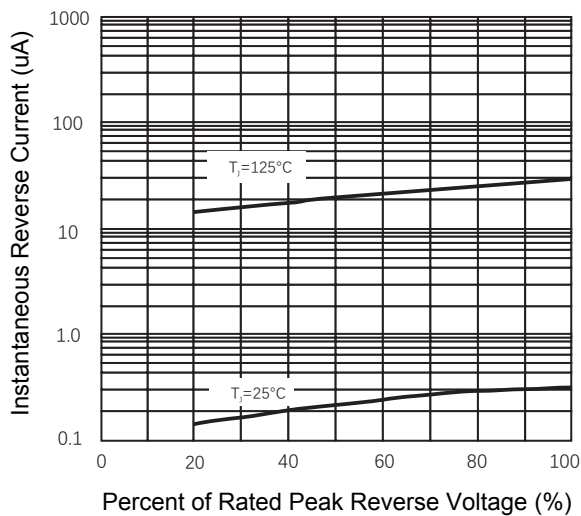
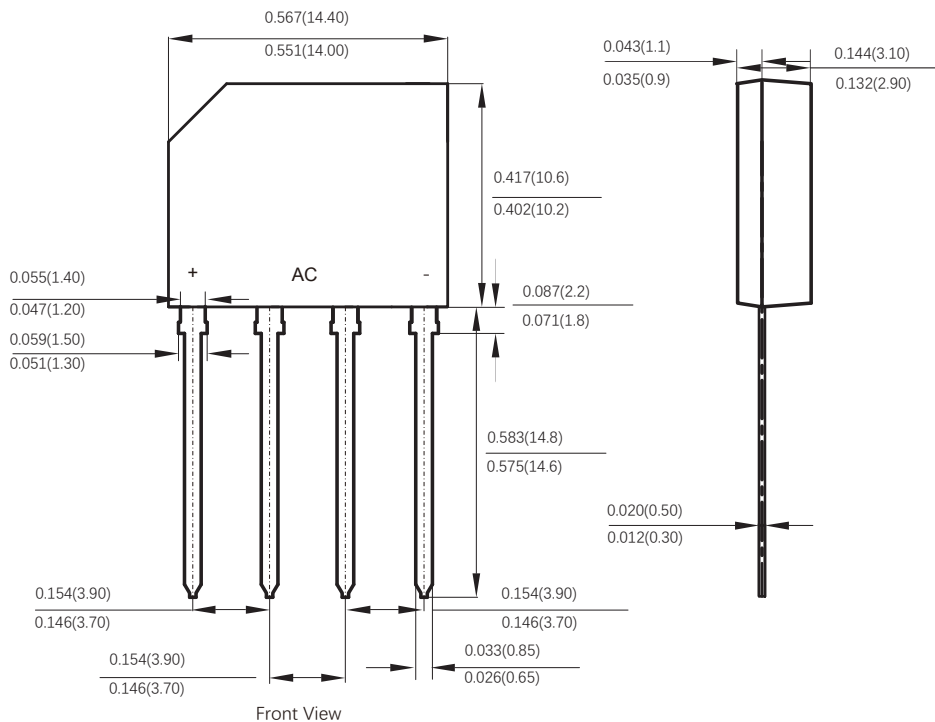


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (KBP)



Dimensions in inches and (millimeters)

Order Information

Device	Package	Marking	Carrier	Quantity
GSKBP3005	KBP	KBP3005	Tube	30pcs / Tube
GSKBP301	KBP	KBP301	Tube	30pcs / Tube
GSKBP302	KBP	KBP302	Tube	30pcs / Tube
GSKBP304	KBP	KBP304	Tube	30pcs / Tube
GSKBP306	KBP	KBP306	Tube	30pcs / Tube
GSKBP308	KBP	KBP308	Tube	30pcs / Tube
GSKBP310	KBP	KBP310	Tube	30pcs / Tube