



GBP3005 THRU GBP310

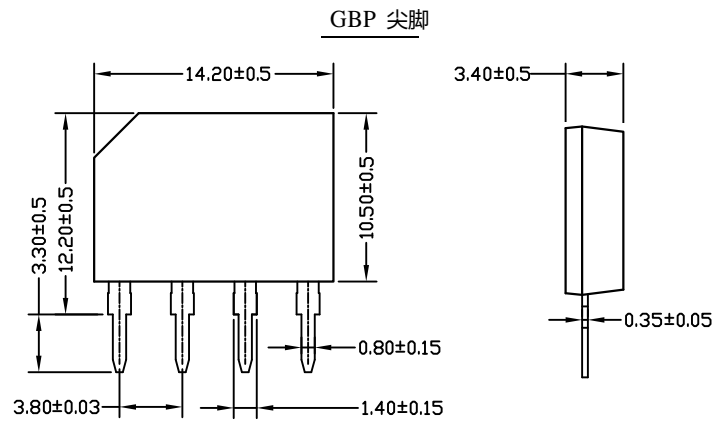
BRIDGE RECTIFIERS

FEATURES

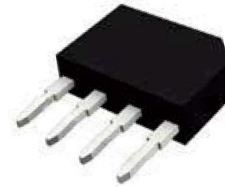
- UL Recognized File # E469616
- Reliable low cost construction utilizing molded plastic technique
- Ideal for printed circuit board
- Low forward voltage drop
- Low reverse leakage current
- High surge current capability
- Glass passivated chip junction

MECHANICAL DATA

Case: Molded plastic, GBP
 Epoxy: UL 94V-O rate flame retardant
 Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
 Mounting position: Any
 Weight: 0.053ounce, 1.5gram



Dimensions in inches and (millimeters)



Maximum Ratings and Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

	Symbols	GBP3005	GBP301	GBP302	GBP304	GBP306	GBP308	GBP310	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_A=50$	$I_{(AV)}$	3.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							Amp
Maximum Forward Voltage at 3.0A DC and 25	V_F	1.1							Volts
Maximum Reverse Current at $T_A=25$ at Rated DC Blocking Voltage $T_A=100$	I_R	10.0 500							uAmp
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	30							/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	11							/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							
Rating for fusing ($t < 8.3ms$)	$I^2 t$	50							A ² s

NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal Resistance Junction to Ambient and from junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted.



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Forward Current Derating Curve

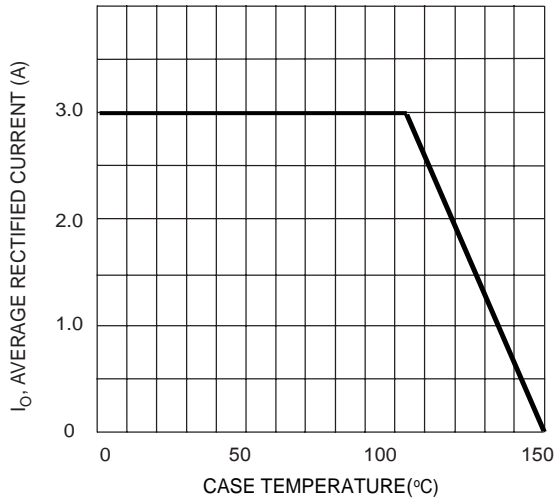


Fig. 2 Typical Fwd Characteristics

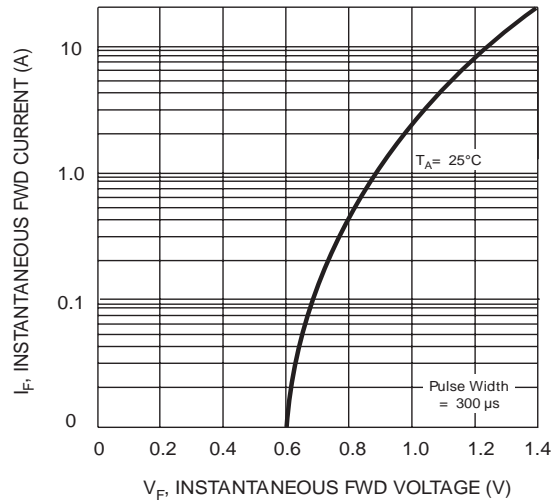


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

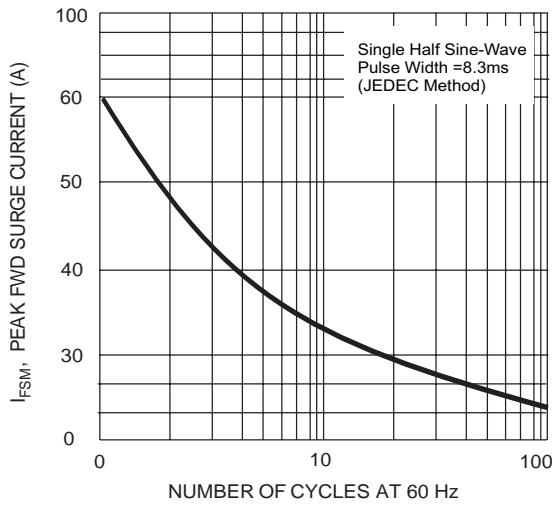


Fig. 4 Typical Junction Capacitance

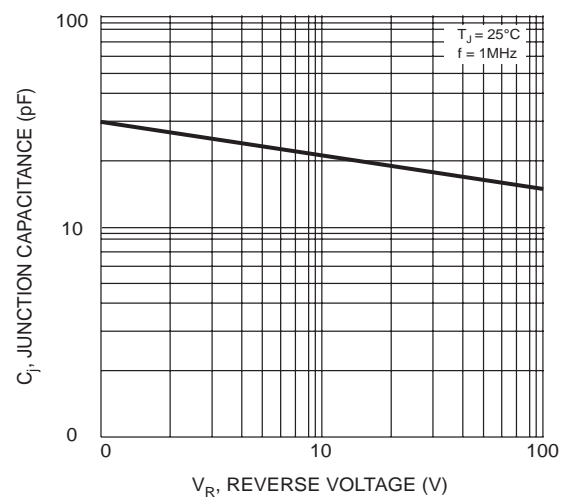


Fig. 5 Typical Reverse Characteristics (per element)

