

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

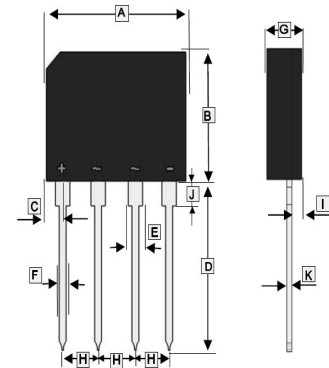
### FEATURES

- $I_o$  : 3A
- $V_{RRM}$  : 50~1000V
- Glass passivated chip
- High surge forward current capability

### APPLICATIONS

- General purpose 1 phase Bridge rectifier applications

**GBP**



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	14.25	14.75	G	3.35	3.65
B	10.1	10.6	H	3.7	3.9
C	1.23	1.83	I	0.8	1.1
D	14.25	14.73	J	1.8	2.2
E	1.22	1.42	K	0.35	0.55
F	0.76	0.86			

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		GBP 3005	GBP 301	GBP 302	GBP 304	GBP 306	GBP 308	GBP 310	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @ 60Hz sine wave, R-load	Without heatsink $T_C=70^\circ\text{C}$	3.0							A
	With heatsink $T_C=135^\circ\text{C}$								
Surge (Nonrepetitive) Forward Current @ 60Hz sine wave, 1 cycle, $T_J=25^\circ\text{C}$	$I_{FSM}$	80							A
Current Squared Time <sup>1</sup>	$I^2t$	26							A <sup>2</sup> S
Peak Forward Voltage @ $I_{FM}=1.5\text{A}$ , Pulse measurement, Rating of per diode	$V_{FM}$	1.05							V
Peak Reverse Current @ $V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	$I_{RRM}$	10							$\mu\text{A}$
Thermal Resistance	$R_{\theta JA}$	47							°C / W
	$R_{\theta JC}$	10							
Junction and Storage temperature range	$T_J, T_{STG}$	-55~+150							°C

Notes :

1.  $1\text{ms} \leq t < 8.3\text{ms}$   $T_J=25^\circ\text{C}$  , Rating of per diode

**RATINGS AND CHARACTERISTIC CURVES**

