

GBP3005-GBP310

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE: 50 - 1000V CURRENT: 3.0 A

Features

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 70 Amperes peak

Mechanical Data

Case: Molded Plastic

• Terminals: Leads solderable per MIL-STD-202,

Method 208

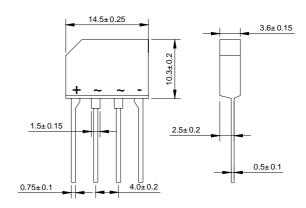
Mounting position: Any

Weight: 0.06 ounce, 1.7 grams





GBP



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

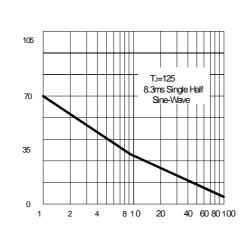
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBP3005	GBP301	GBP302	GBP304	GBP306	GBP308	GBP310	Unit
Maximum recurrent 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 forw ard Output current @T _A =25℃	I _{F(AV)}	3.0							А
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load	I _{FSM}	70							А
Maximum instantaneous forward voltage @ 1.5 A	V _F	1.0							V
	I _R	5.0 0.5							μA m A
Operating junction temperature range	TJ	- 55 + 150							C
Storage temperature range	T _{STG}	- 55 + 150							C



FIG.1 - PEAK FORWARD SURGE CURRENT

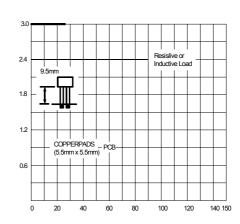
PEAK FORWARD SURGE CURRENT, AMPERSES



NUMBER OF CYCLES AT 60Hz

FIG.2 - FORWARD DERATING CURVE OUTPUT RECTIFIED CURRENT

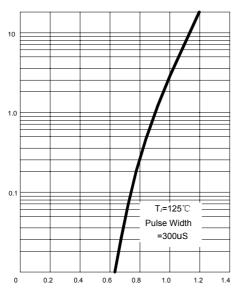




AMBIENT TEMPERATURE, °C

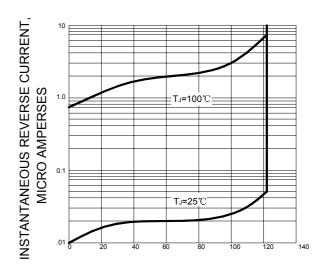
FIG.3 - TYPICAL FORWARD CHARACTERISTICS





INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.4 - TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE,%