

Silicon Bridge Rectifiers

GBP3005--GBP310

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 70Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead solderable per MIL-STD-202 method 208
- Plastic material has UL flammability classification 94V-O
- Glass passivated chip junctions



Lead-free

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	GBP 3005	GBP 301	GBP 302	GBP 304	GBP 306	GBP 307	GBP 308	GBP 310	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	700	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	490	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	700	800	1000	V
Maximum average forward Output current @TA=25°C	$I_{F(AV)}$	3.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	70								A

Thermal Characteristics

Characteristic	Symbol	GBP 3005	GBP 301	GBP 302	GBP 304	GBP 306	GBP 307	GBP 308	GBP 310	UNITS
Operating junction temperature range	T_J	- 55 ---- + 150								°C
Storage temperature range	T_{STG}	- 55 ---- + 150								°C

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	GBP 3005	GBP 301	GBP 302	GBP 304	GBP 306	GBP 307	GBP 308	GBP 310	UNITS
Maximum instantaneous forward voltage @1.5A	V_F	1.0								V
Maximum reverse current @TA=25°C at rated DC blocking voltage @TA=100°C	I_R	5.0 0.5								μ A mA



Silicon Bridge Rectifiers

GBP3005--GBP310

PACKAGE OUTLINE DIMENSIONS

GBP		
Dim	Min	Max
A	14.45	14.85
B	10.30	10.70
C	3.45	3.75
C1	2.00	2.40
E	0.40	0.60
F	14.30	14.90
I	1.30	1.60
I1	0.60	0.90
K	3.75	4.30
All Dimensions in mm		

PACKAGE INFORMATION

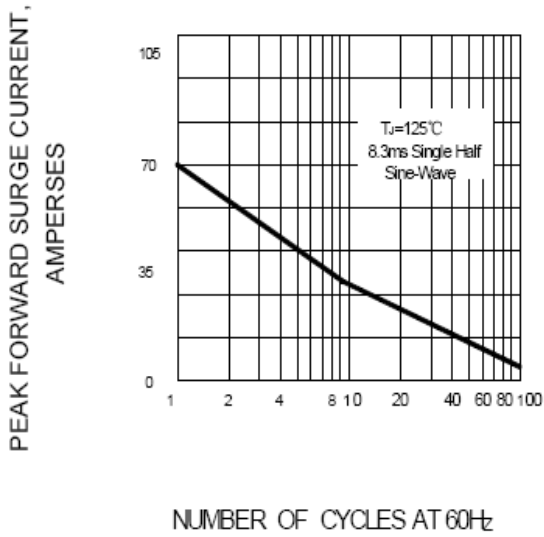
Device	Package	Shipping
GBP3005--GBP310	GBP	500Units/Box



Silicon Bridge Rectifiers

GBP3005--GBP310

FIG.1 -- PEAK FORWARD SURGE CURRENT



**FIG.2 -- FORWARD DERATING CURVE
OUTPUT RECTIFIED CURRENT**

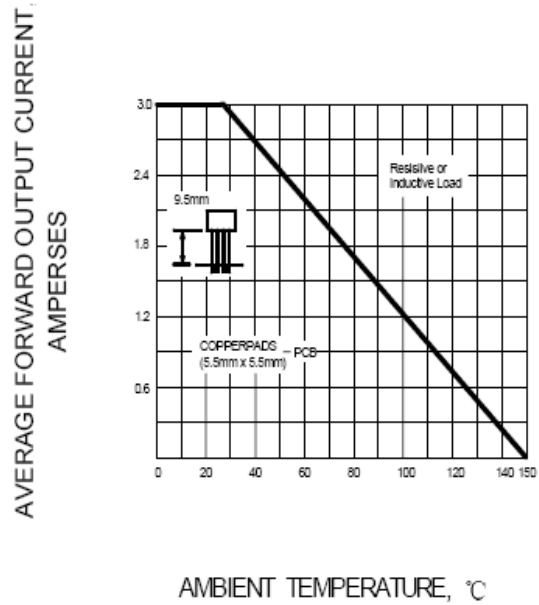


FIG.3 -- TYPICAL FORWARD CHARACTERISTICS

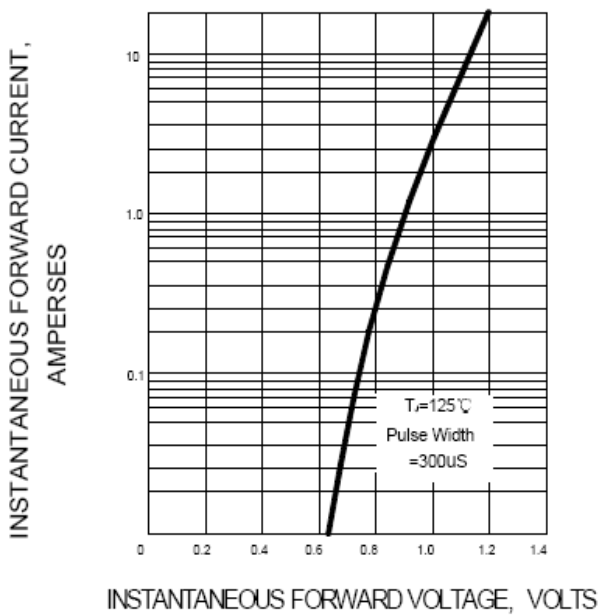


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

