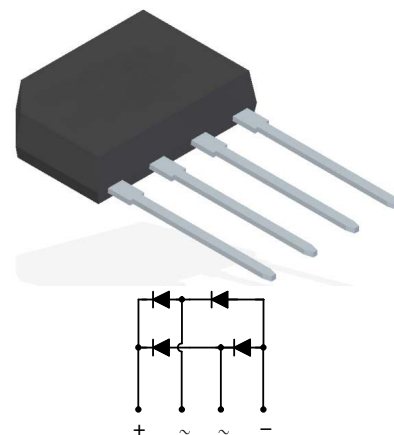




VOLTAGE RANGE: 50 --- 1000 V

CURRENT: 6.0 A

GBP



Features

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 200 Amperes 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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

		GBP6005	GBP601	GBP602	GBP604	GBP606	GBP608	GBP610	UNITS
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 forward output current @ $T_A=25^\circ C$	$I_{F(AV)}$	6.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	200							A
I ² t Rating for fusing @ $T_j=25^\circ C$	I^2t	166							A ² S
Typical Junction Capacitance	C_J	400							pF
Maximum instantaneous forward voltage @ 3.0 A	V_F	1.1							V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	I_R	10.0 1.0							μA mA
Typical thermal resistance per leg	$R_{\theta JA}$	17							°C/W
	$R_{\theta JC}$	8.7							
Operating junction temperature range	T_J	- 55 ---- + 150							°C
Storage temperature range	T_{STG}	- 55 ---- + 150							°C



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

FIG. 1 FORWARD CURRENT DERATING CURVE

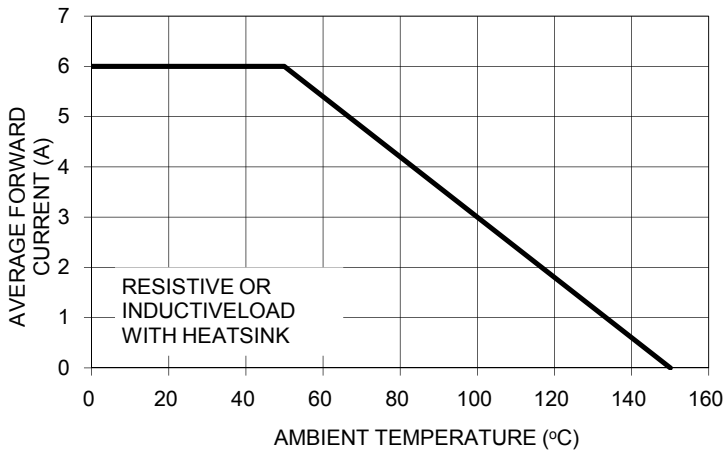


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

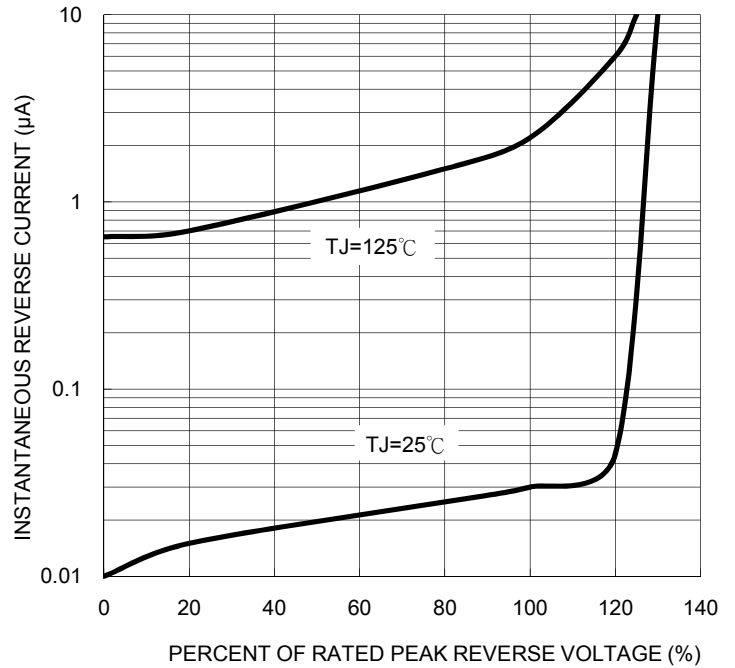


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

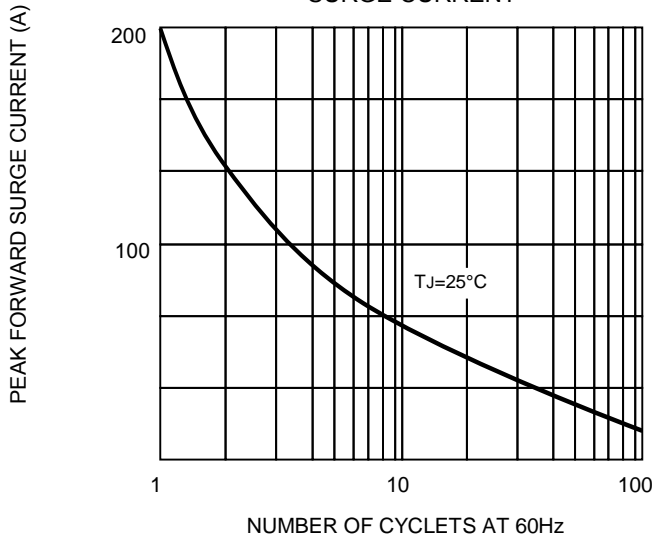
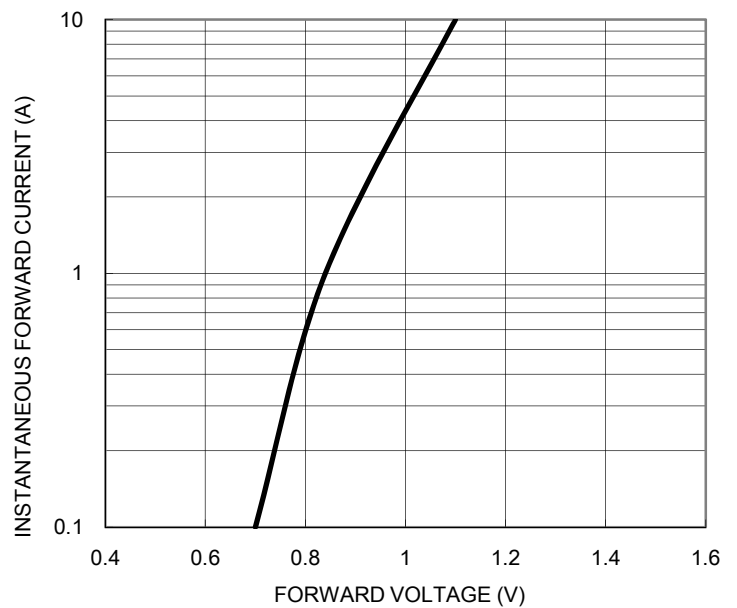
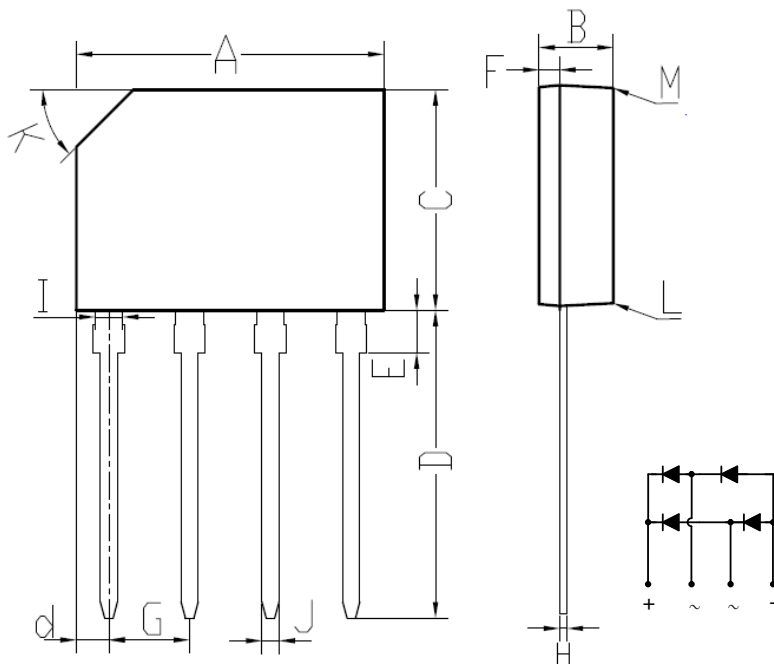


FIG. 4 TYPICAL FORWARD CHARACTERISTICS



GBP Package Outline Dimensions



GBP		
DIM.	MIN.	MAX.
A	14.25	14.75
B	3.35	3.65
C	10.20	10.60
D	14.25	14.73
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.56	4.06
H	0.35	0.55
I	1.22	1.42
J	0.76	0.86
K	2.7 x 45° (Typ)	
L	#	3°
M	#	2°
All Dimensions in millimeter		

Device	Package	Shipping
GBP6005--GBP610	GBP	500Units/Box