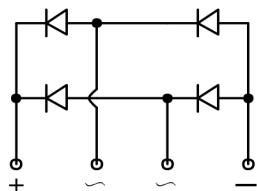
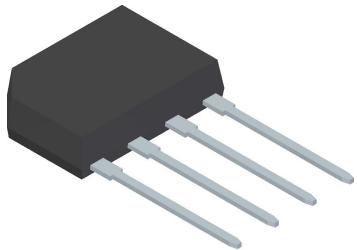


REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 6.0 Amperes

GBP



FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V#0

MECHANICAL DATA

- Polarity : As marked on body
- Weight : 0.05 ounces, 1.52 grams
- Mounting position : Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBP 6005	GBP 601	GBP 602	GBP 604	GBP 606	GBP 608	GBP 610	UNIT
Maximum Repetitive 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 Rectified Current @ $T_C=105^\circ\text{C}$ (With heatsink) (Without heatsink)	$I_{(AV)}$				6.0				A
3.0									
Peak Forward Surge Current @ $T_j = 25^\circ\text{C}$ 8.3ms single half sine-wave	I_{FSM}				150				A
Maximum Forward Voltage at 4.0A DC	V_F				1.1				V
Maximum DC Reverse Current at rated @ $T_j=25^\circ\text{C}$ Blocking Voltage @ $T_j=125^\circ\text{C}$	I_R				5.0				uA
500									
$I^2 t$ Rating for fusing (3ms $\leq t \leq$ 8.3ms)	$I^2 t$				93				$A^2 \text{ s}$
Typical Junction Capacitance per element (Note 1)	C_J				46				pF
Typical thermal resistance (Unit mounted on 75mmx75mmx1.6mm Copper plate heatsink.)	$R_{\theta JC}$				3.0				$^\circ\text{C/W}$
Typical thermal resistance (without heatsink)	$R_{\theta JC}$				8.0				$^\circ\text{C/W}$
Operation and Storage Temperature Range	T_J, T_{STG}				-55 to 150				$^\circ\text{C}$

Note : (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Fig.1 Average Rectified Output Current Derating Curve

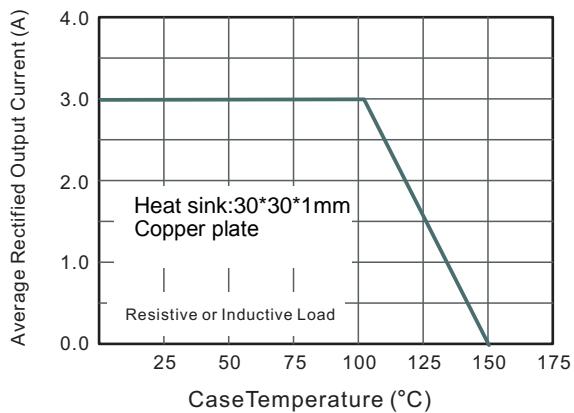


Fig.2 Typical Reverse Characteristics

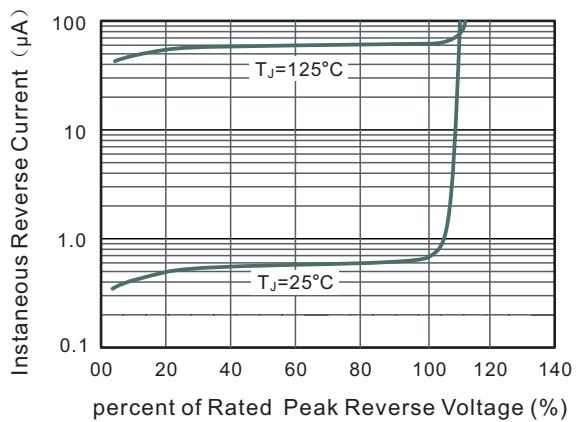


Fig.3 Typical Instantaneous Forward Characteristics

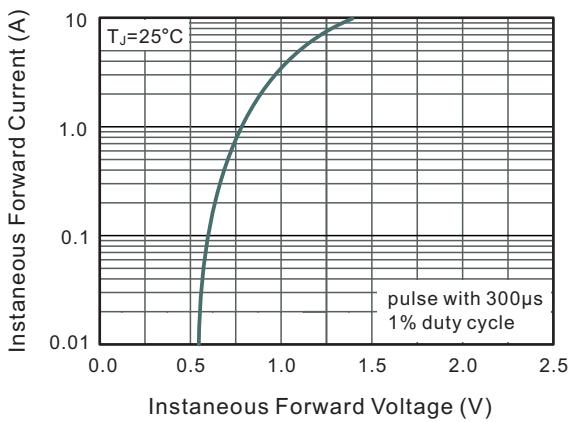
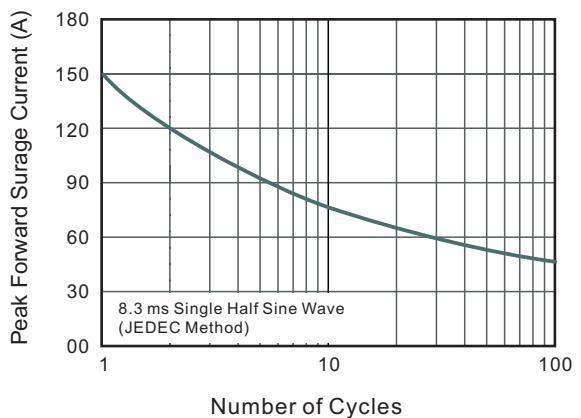
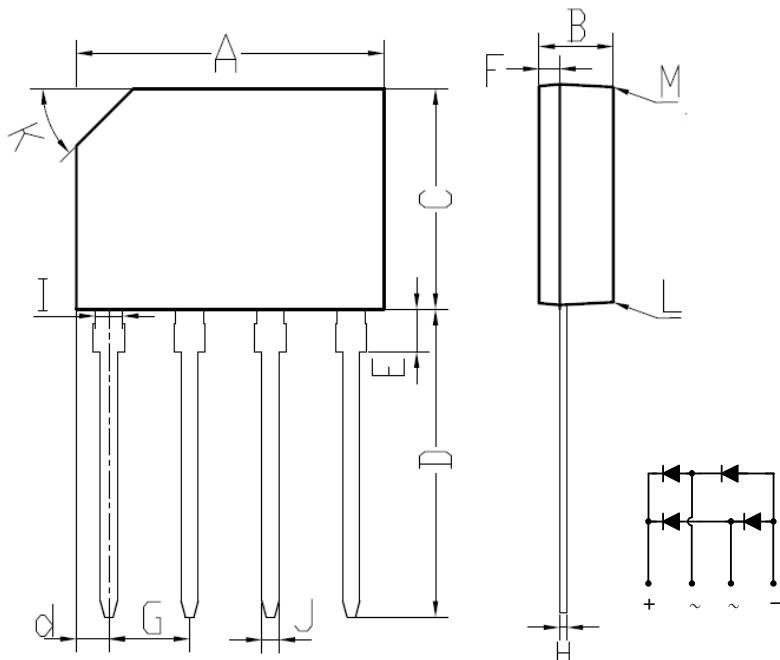


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



GBP Package Outline Dimensions



GBP		
DIM.	MIN.	MAX.
A	14.20	14.70
B	3.00	3.60
C	10.20	10.60
D	13.80	14.40
d	1.40	1.70
E	1.80	2.20
F	0.80	1.10
G	3.71	3.91
H	0.30	0.55
I	1.22	1.42
J	0.76	0.86
K	$2.7 \times 45^\circ$ (Typ)	
L	#	3°
M	#	2°

All Dimensions in millimeter