

GLASS PASSIVATED BRIDGE RECTIFIERS

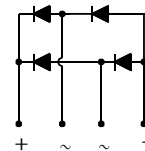
FEATURES

- 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

GBP



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	GBP 4005	GBP 401	GBP 402	GBP 404	GBP 406	GBP 408	GB 410	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 @ $T_C=105^\circ C$ (With heatsink) (Without heatsink)	$I_{(AV)}$					4.0 2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave @ $T_j = 25^\circ C$ @ $T_j = 125^\circ C$	I_{FSM}					150 120				A
Maximum Forward Voltage at 4.0A DC	V_F					1.1				V
Maximum DC Reverse Current at rated Blocking Voltage @ $T_j=25^\circ C$ @ $T_j=125^\circ C$	I_R					5.0 500				μA
$I^2 t$ Rating for fusing ($3ms \leq t \leq 8.3ms$)	$I^2 t$					93				$A^2 S$
Typical Junction Capacitance per element (Note 1)	C_J					46				pF
Typical thermal resistance (Unit mounted on 75mmx75mmx1.6mm Copper plate heatsink.)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$					3 8 15				$^\circ C/W$
Typical thermal resistance (without heatsink)	$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$					14 20 40				$^\circ C/W$
Operation and Storage Temperature Range	T_J, T_{STG}					-55 to 150				$^\circ C$

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



GBP4005 ~ GBP410

FIG.1- FORWARD CURRENT DERATING CURVE

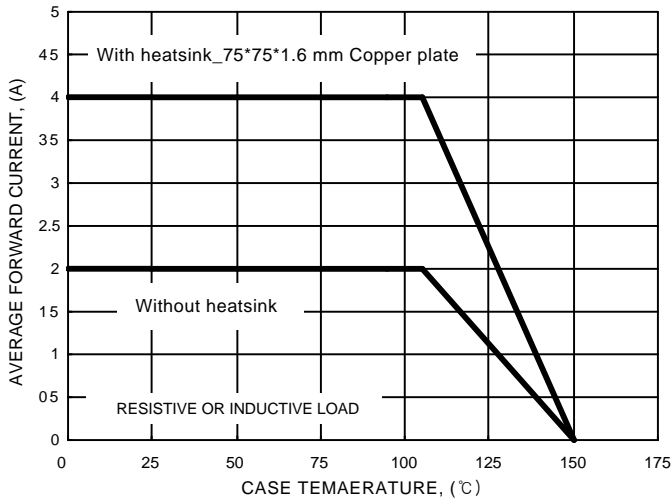


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

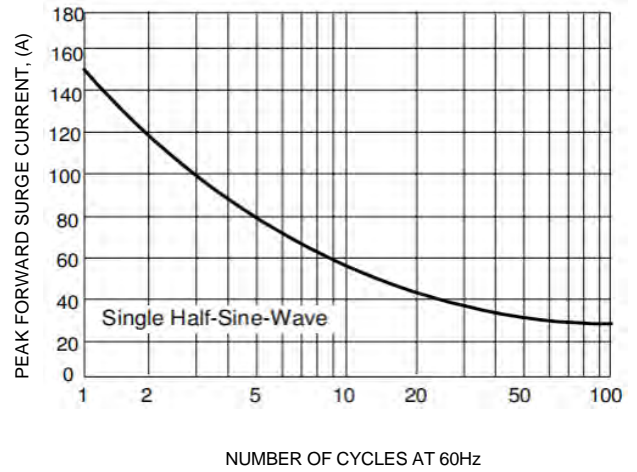


FIG.3- TYPICAL JUNCTION CAPACITANCE

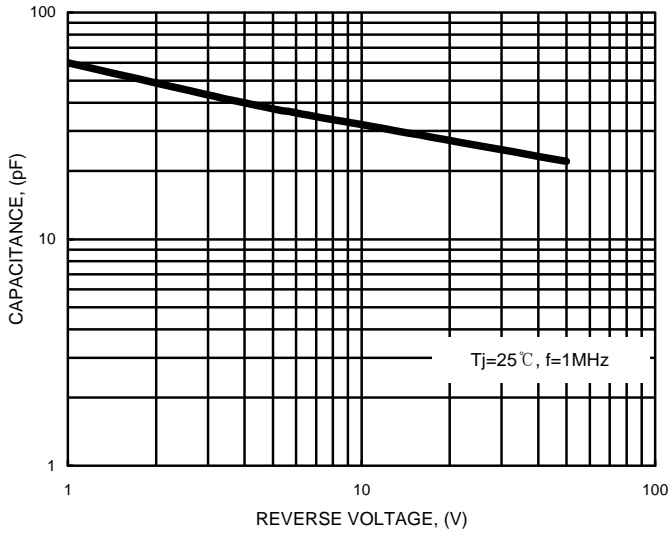


FIG.4- TYPICAL FORWARD CHARACTERISTICS

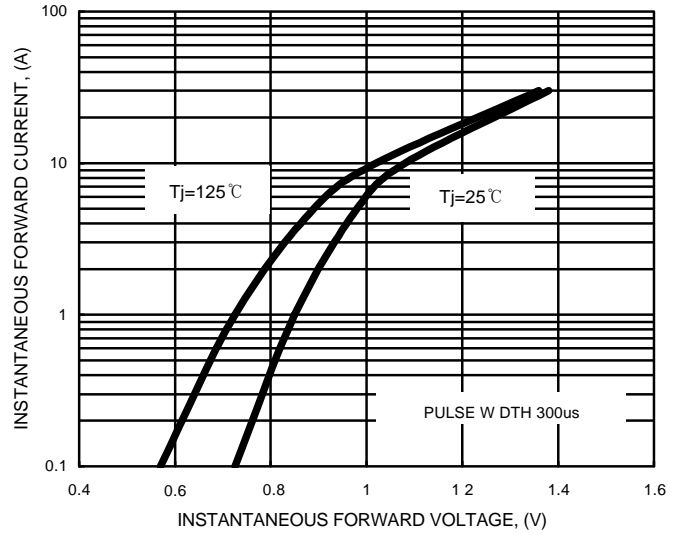
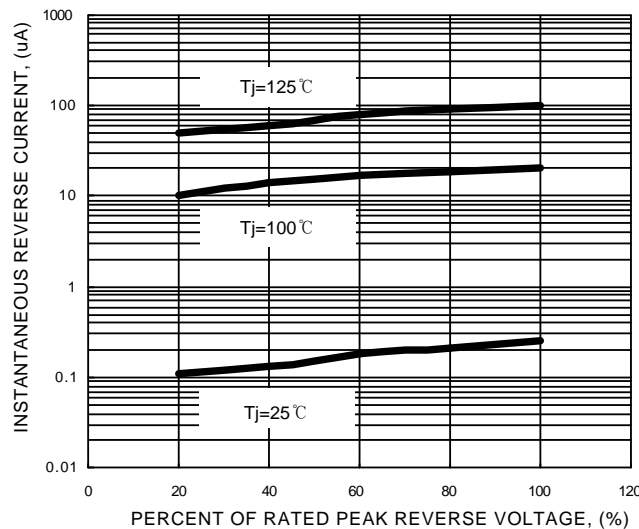
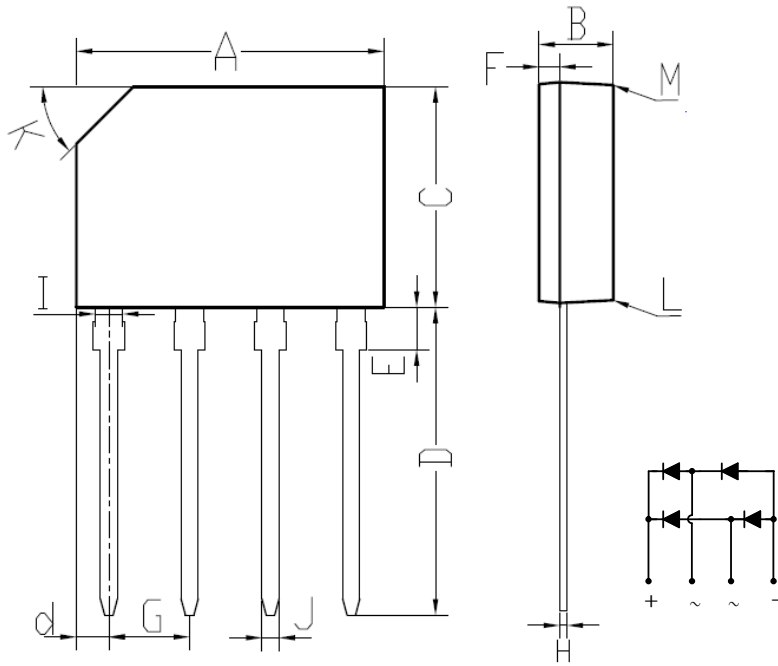


FIG.5- TYPICAL REVERSE CHARACTERISTICS



GBP Package Outline Dimensions



GBP		
DIM.	MIN.	MAX.
A	14.20	14.70
B	3.30	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 x 45° (Typ)	
L	#	3°
M	#	2°
All Dimensions in millimeter		