

GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE – 400 to 1000 Volts
FORWARD CURRENT – 6.0 Amperes

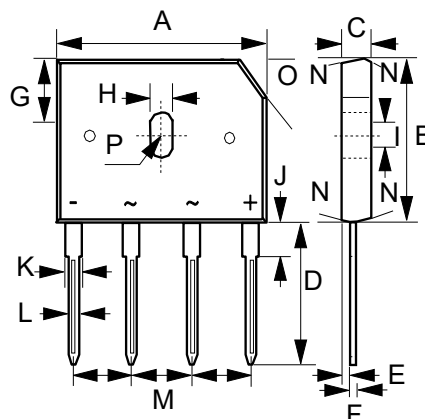
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- UL recognition file # E95060
- The Plastic material, UL flammability classification 94V-0

MECHANICAL DATA

- Polarity: As marked on Body
- Weight: 0.15 ounces, 4.0 grams, Approximate
- Mounting position : Any

GBU



GBU		
DIM	MIN	MAX
A	21.80	22.30
B	18.30	18.80
C	3.30	3.56
D	17.50	18.00
E	0.76	1.00
F	0.46	0.56
G	7.40	7.90
H	3.50	4.10
I	1.65	2.16
J	2.25	2.75
K	1.95	2.35
L	1.02	1.27
M	4.83	5.33
N	7.0° TYPICAL	
O	(3.2) x 45°	
P	1.90 PADIUS	
All dimension in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER		SYMBOL	GBU604	GBU606	GBU608	GBU610	UNIT
Maximum repetitive peak reverse voltage		V _{RRM}	400	600	800	1000	V
Maximum DC blocking voltage		V _{DC}	400	600	800	1000	V
Average rectified output current per device	With heatsink, @T _C =100°C Without heatsink, @T _C =100°C	I _(AV)	6 2.8				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	@ T _A =25°C @ T _A =125°C	I _{FSM}	175 140				A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	@ T _A =25°C @ T _A =125°C	I _{FSM}	350 280				A
I ² t rating for fusing (t = 8.3ms)		I ² t	127				A ² S
Storage,Operating temperature range		T _J , T _{STG}	-55 to +150				°C

STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION		SYMBOL	TYP. MAX	UNIT
Forward voltage (Note1)	$I_F = 3\text{A}$	$T_A = 25^\circ\text{C}$	V_F	1.0	V
Leakage current	V_R at rated	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ (Note1)	I_R	5 500	μA
Typical junction capacitance (Note2)			C_J	45	pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (without heatsink)	R_{thJC}	6.0	$^\circ\text{C/W}$
Typical thermal resistance (Note3)	R_{thJC}	2.2	

Note :

- (1) Perform static test after the temperature of oven is steady 20 minutes.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC
- (3) Device mounted on 75 mm * 75 mm * 1.6mm Cu Plate heatsink.

REV. 9, Mar-2019, KBDJ02

RATING AND CHARACTERISTIC CURVES GBU604 thru GBU610

FIG.1 - FORWARD CURRENT DERATING CURVE

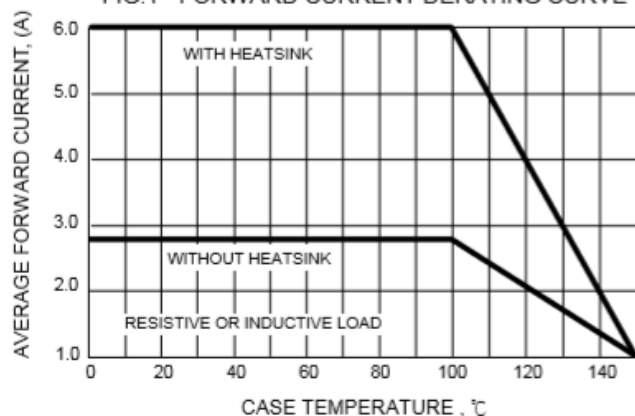


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

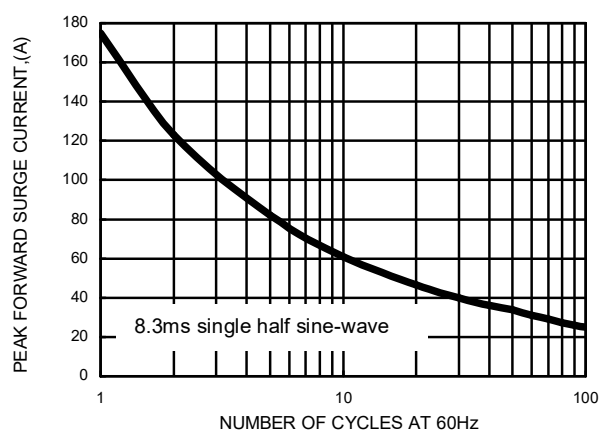


FIG.3- TYPICAL FORWARD CHARACTERISTICS

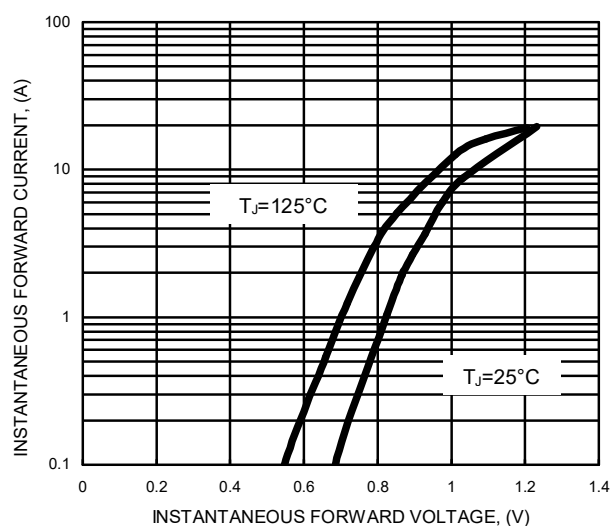


FIG.4- TYPICAL JUNCTION CAPACITANCE

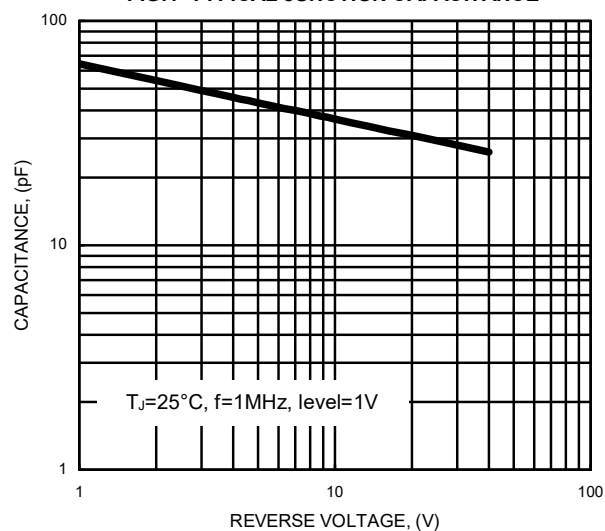
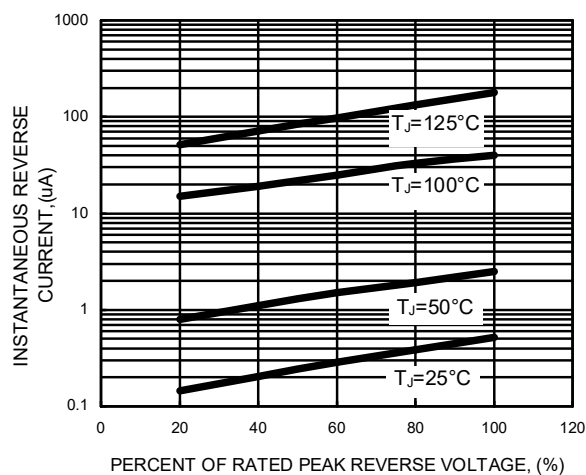


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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