LITE-ON SEMICONDUCTORS

GBP808N

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE – 800 Volts
FORWARD CURRENT – 8.0 Ampere

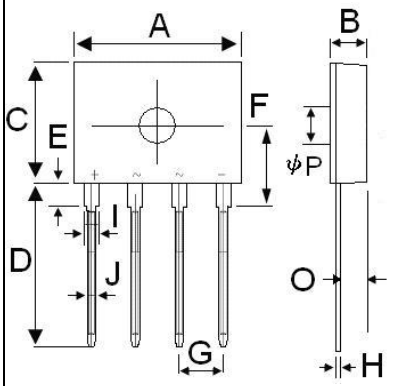
FEATURES

- Rating to 800V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94-0
- UL recognized file#E95060

MECHANICAL DATA

- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Polarity indicator: As marked on body
- Weight: 1.33 grams

GBP



GBP		
Dim.	Min.	Max.
A	14.2	14.7
B	2.9	3.3
C	10.1	10.7
D	13.8	14.4
E	1.8	2.2
F	6.65	7.25
G	3.71	3.91
H	0.4	0.6
I	1.20	1.40
J	0.64	0.84
O	1.8	2.4
P	3.1 ψ	3.3 ψ
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER		SYMBOL	GBP808N	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	800	V
Maximum DC Blocking Voltage		V_{DC}	800	V
Maximum Average Forward Rectified Current @TA = 25 ℃	with Heat-sink without Heat-sink	$I_{(AV)}$	8.0 1.5	A
Peak Forward Surge Current Single half sine-wave @ Tj = 25 ℃	@8.3ms @1.0ms	I_{FSM}	165 330	A
Maximum Forward Voltage at 4.0A DC		V_F	1.05	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T_J = 25℃ @ T_J = 125℃	I_R	1 100	uA
I^2t Rating for fusing (t < 8.3ms)		I^2t	110	A^2S
Typical Junction Capacitance (Note 1)		C_J	45	pF
Typical Thermal Resistance (Unit mounted on 150 mm x 150 mm x 2 mm Cu Plate Heatsink)		$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	3.2 4.8 8	°C/W
Typical Thermal Resistance (Without Heatsink)		$R_{\theta JC}$ $R_{\theta JL}$ $R_{\theta JA}$	9.5 24 28	°C/W
Operating and Storage Temperature Range		T_J, T_{STG}	-55 to +150	°C

Note :

(1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
(2) Device mounted on 150 mm x 150 mm x 2 mm Cu Plate Heatsink

RATING AND CHARACTERISTIC CURVES
GBP808N

LITEON

FIG.1- FORWARD CURRENT DERATING CURVE

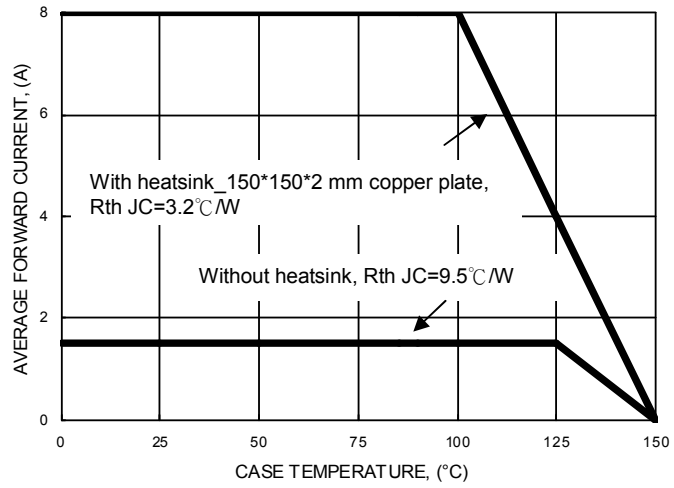


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

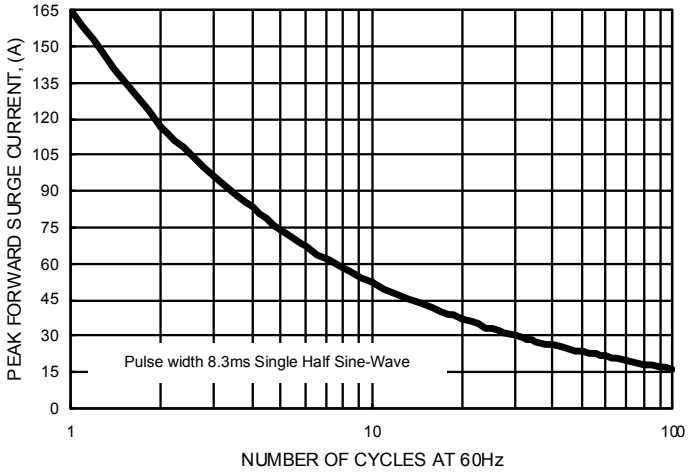


FIG.3- TYPICAL FORWORD CHARACTERISTICS

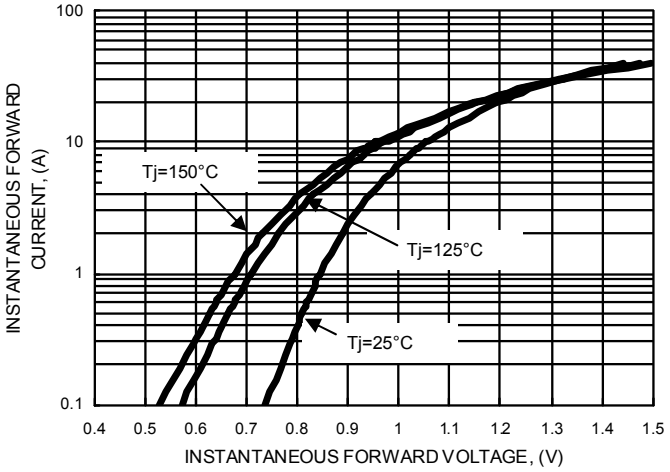


FIG.4- TYPICAL JUNCTION CAPACITANCE

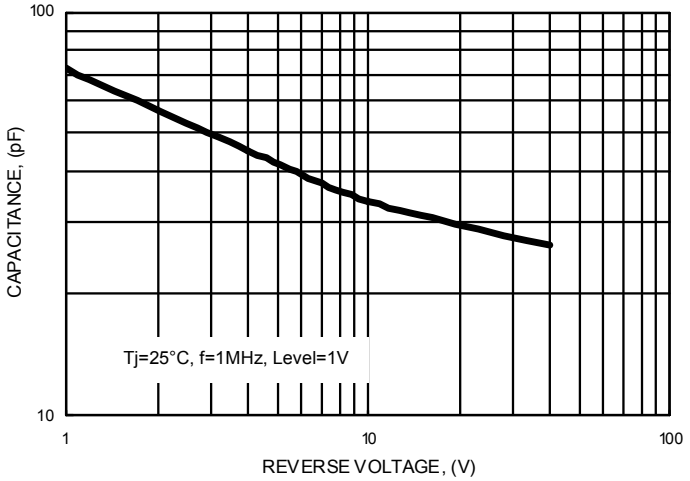
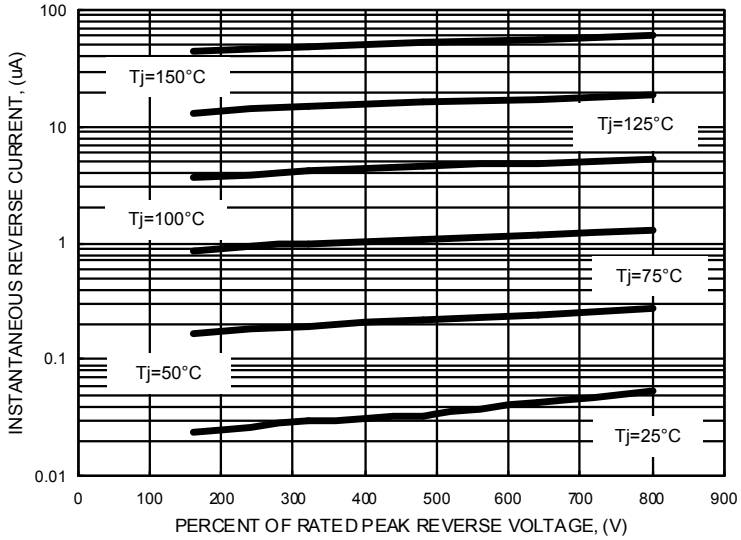


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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