LITE-ON SEMICONDUCTORS

GBP306 thru GBP310

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE – 600 to 1000 Volts
FORWARD CURRENT – 3.0 Ampere

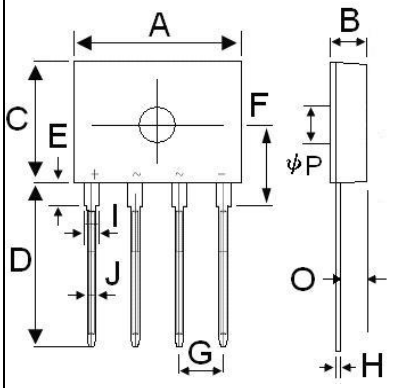
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94-0
- UL Recognition 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 ϕ	3.3 ϕ
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GBP306	GBP308	GBP310	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	600	800	1000	V
Maximum Average Forward Rectified Current@Tc = 100 ℃ (with Heat-sink) (without Heat-sink)	$I_{(AV)}$	3.0 1.8			A
Peak Forward Surge Current 8.3ms single half sine-wave @Tj = 25 ℃ @Tj = 125 ℃	I_{FSM}	90 72			A
Peak Forward Surge Current 1.0ms single half sine-wave @Tj = 25 ℃ @Tj = 125 ℃	I_{FSM}	200 160			A
Maximum Forward Voltage at 1.5A DC	V_F	1.05			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ T_J = 25℃ @ T_J = 125℃	I_R	5 500			uA
I^2t Rating for fusing (3ms ≦t < 8.3ms)	I^2t	35			A^2S
Typical Junction Capacitance (Note 1)	C_J	25			pF
Typical Thermal Resistance (Note 2)	$R\Theta_{JC}$ $R\Theta_{JA}$ $R\Theta_{JL}$	9 20 9			°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 30mm x 30mm x 1mm Cu Plate Heatsink.

RATING AND CHARACTERISTIC CURVES
GBP306 to GBP310

LITEON

FIG.1- FORWARD CURRENT DERATING CURVE

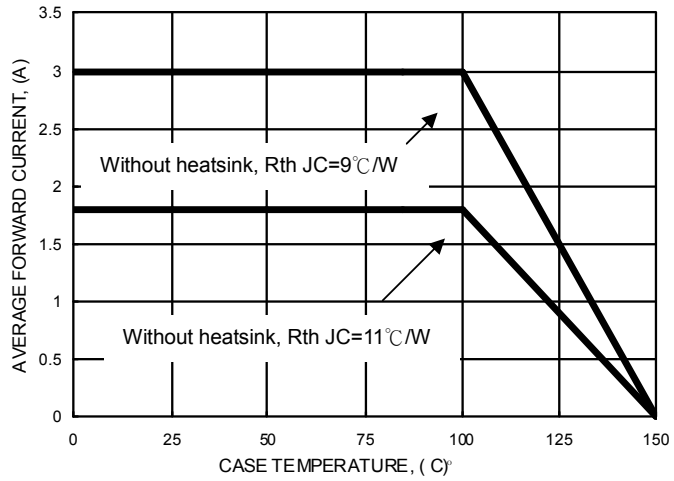


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

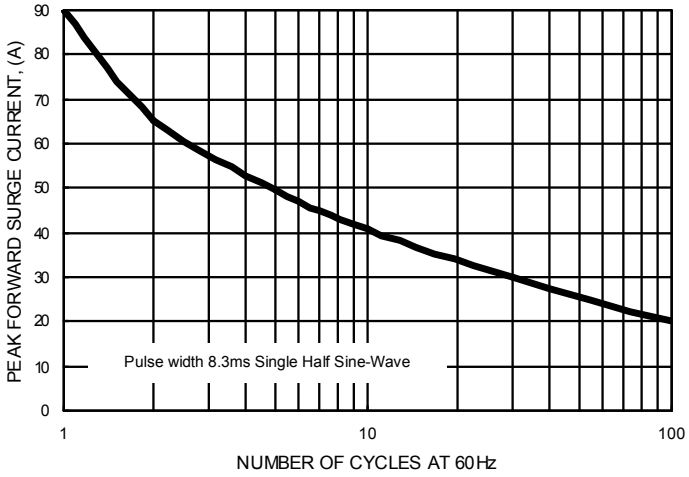


FIG.3- TYPICAL FORWORD CHARACTERISTICS

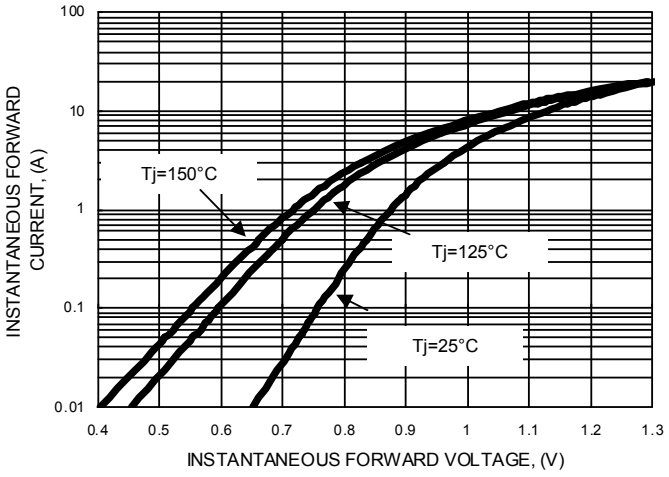


FIG.4- TYPICAL JUNCTION CAPACITANCE

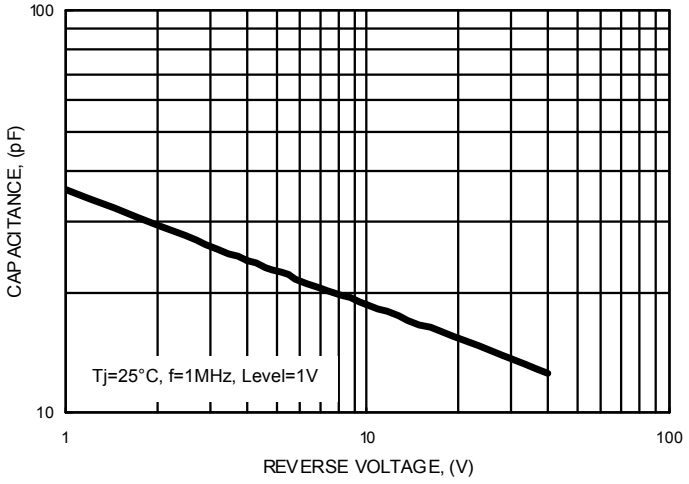


FIG.5- TYPICAL REVERSE CHARACTERISTICS

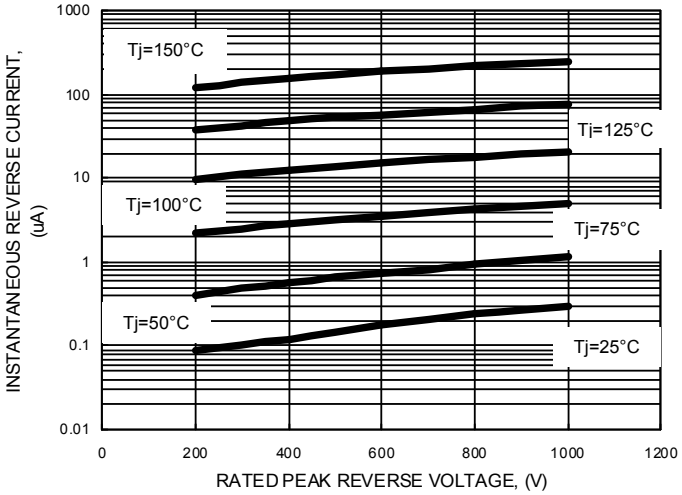
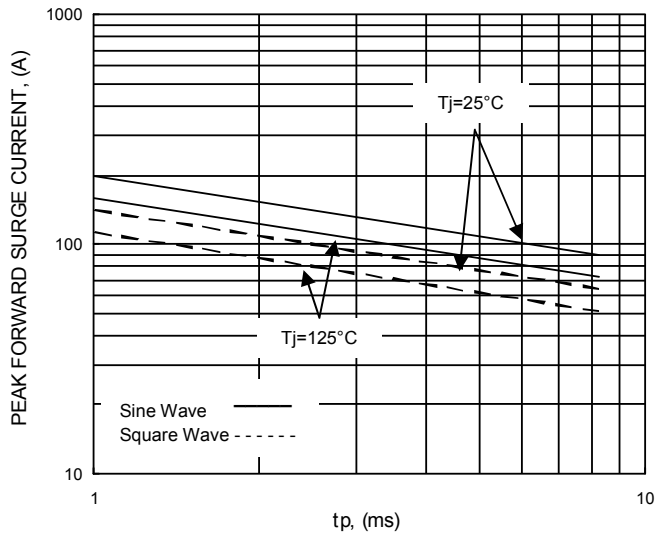


FIG.6_NON-REPETITIVE SURGE CURRENT



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