LITE-ON SEMICONDUCTOR

GBJ2504 thru GBJ2510

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE **- 400** to **1000** Volts
FORWARD CURRENT **- 25** Amperes

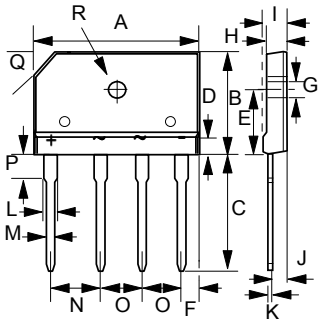
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E95060

MECHANICAL DATA

- Polarity : Symbols molded on body
- Weight : 0.23 ounces, 6.6 grams
- Mounting position : Any

GBJ



GBJ		
DIM.	MIN.	MAX.
A	29.70	30.30
B	19.70	20.30
C	17.0	18.0
D	4.70	4.90
E	10.80	11.20
F	2.30	2.70
G	3.10	3.40
H	3.40	3.80
I	4.40	4.80
J	2.50	2.90
K	0.60	0.80
L	2.00	2.40
M	0.90	1.10
N	9.80	10.20
O	7.30	7.70
P	3.80	4.20
Q	(3.0) x 45°	
R	3.10 ∅	3.40 ∅
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @T_C =100℃ (without heatsink)	$I_{(AV)}$	25.0 4.2				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	350				A
Maximum forward Voltage at 12.5A DC	V_F	1.05				V
Maximum DC Reverse Current @T_J =25℃ at Rated DC Blocking Voltage @T_J =125℃	I_R	10 500				uA
I^2t Rating for fusing (t < 8.3ms)	I^2t	510				A^2S
Typical Junction Capacitance per element (Note 1)	C_J	85				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.0				℃/W
Operating Temperature Range	T_J	-55 to +150				℃
Storage Temperature Range	T_{STG}	-55 to +150				℃

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 250mm x 250mm x 20mm Aluminum Plate Heatsink.

RATING AND CHARACTERISTIC CURVES
GBJ2504 thru GBJ2510

FIG.1 - FORWARD CURRENT DERATING CURVE

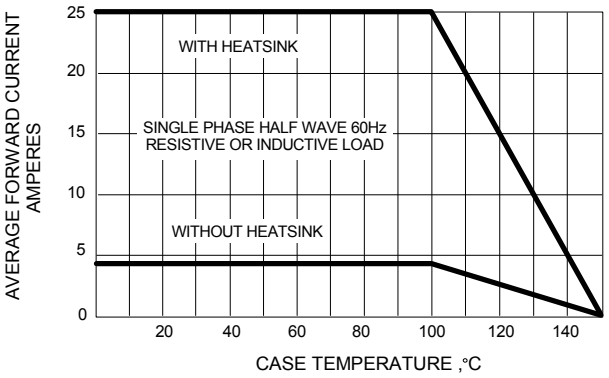


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

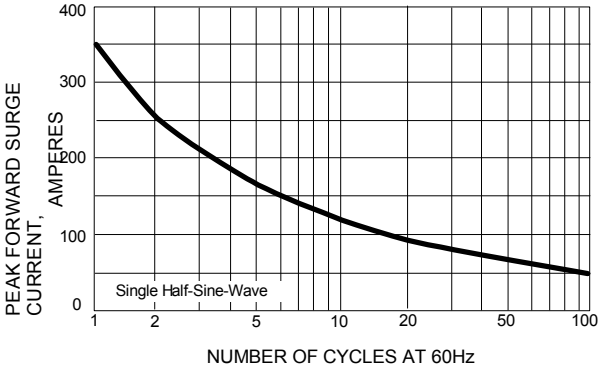


FIG.3 - TYPICAL JUNCTION CAPACITANCE

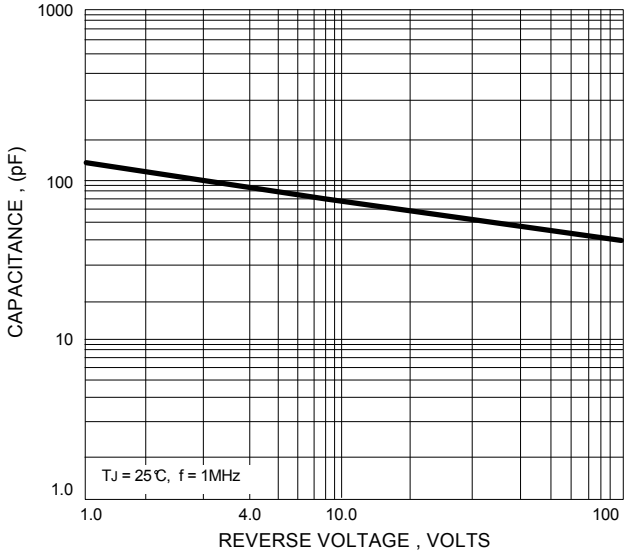


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

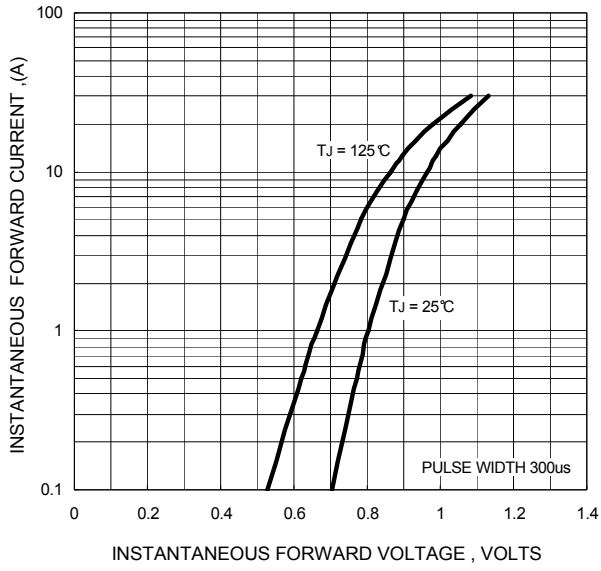


FIG.5 - TYPICAL REVERSE CHARACTERISTICS