LITE-ON SEMICONDUCTOR

GBJ25V08

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE – 800 Volts
FORWARD CURRENT – 25 Amperes

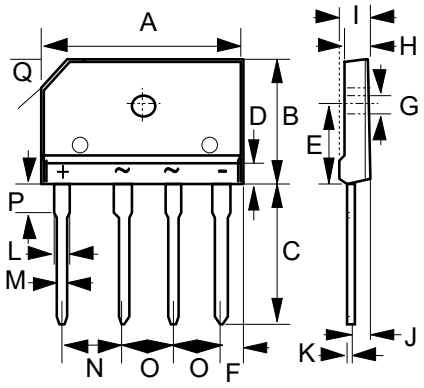
FEATURES

- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- UL recognition file # E95060

MECHANICAL DATA

- Case: GBJ
- Case Material: Plastic material, UL flammability classification 94V-0
- Component in accordance to RoHs 2002/95/EC
- Polarity indicator: Symbol molded on body
- Weight: 6.82 grams (Approximate)

GBJ



GBJ		
DIM	MIN	MAX
A	29.70	30.30
B	19.70	20.30
C	17.00	18.00
D	4.70	4.90
E	10.80	11.20
F	2.30	2.70
G	3.10Ø	3.40Ø
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°	
All dimension in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER		SYMBOL	GBJ25V08	UNIT
Device marking code		Note	GBJ25V08	--
Maximum repetitive peak reverse voltage		V_{RRM}	800	V
Maximum DC blocking voltage		V_{DC}	800	V
Average rectified output current per device	With heatsink Without heatsink	$I_{(AV)}$	25 4.8	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	@ T_A=25°C @ T_A=125°C (Note1)	I_{FSM}	600 480	A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	@ T_A=25°C @ T_A=125°C (Note1)	I_{FSM}	1200 960	A
I^2t rating for fusing (t = 8.3ms)		I^2t	1494	A^2S
Operating and storage 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 = 12.5A	T_A = 25°C T_A = 125°C (Note1)	V_F	0.91 --	0.94 --	V
Leakage current	V_R at rated	T_A = 25°C T_A = 125°C (Note1)	I_R	5 500		uA
Typical junction capacitance (Note 2)			C_J	168		pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 3)	$RthJ_C$ $RthJ_L$ $RthJ_A$	2 5 5	°C/W

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) Thermal resistance junction to case, lead and ambient in accordance with JESD-51. Unit mounted on 195 mm*110 mm*10 mm steel plate

REV.2, Apr.-2019, KBDG42

RATING AND CHARACTERISTIC CURVES
GBJ25V08

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FIG.1- FORWARD CURRENT DERATING CURVE

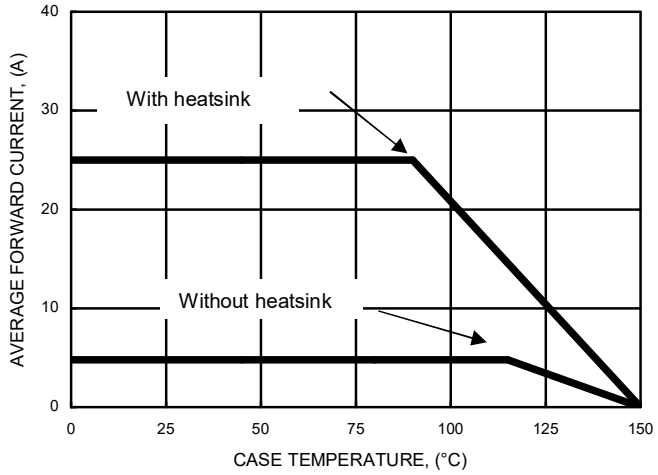


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

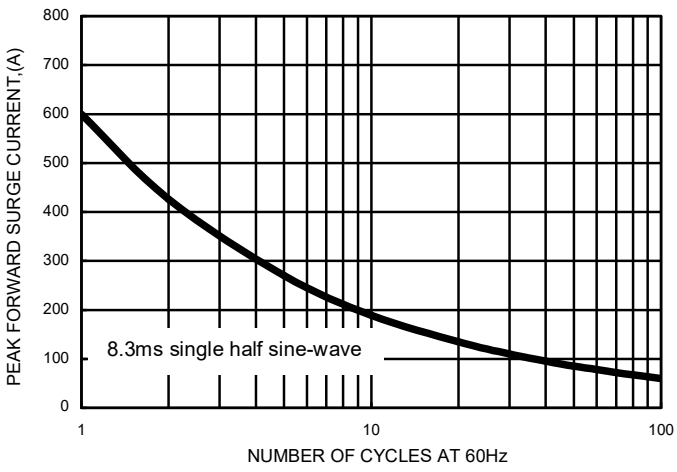


FIG.3- TYPICAL FORWORD CHARACTERISTICS

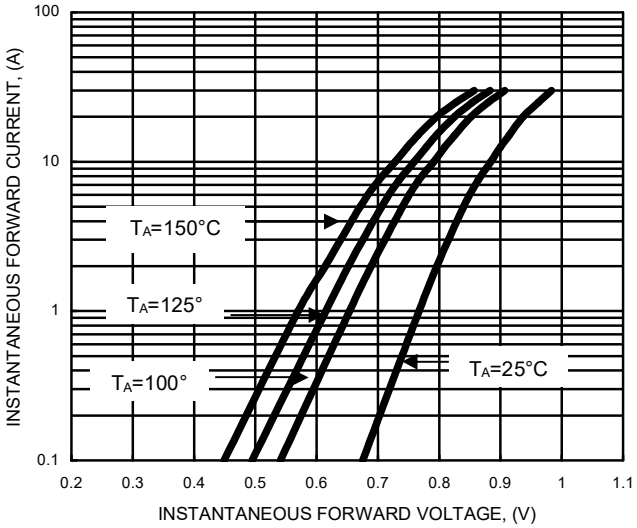


FIG.4- TYPICAL JUNCTION CAPACITANCE

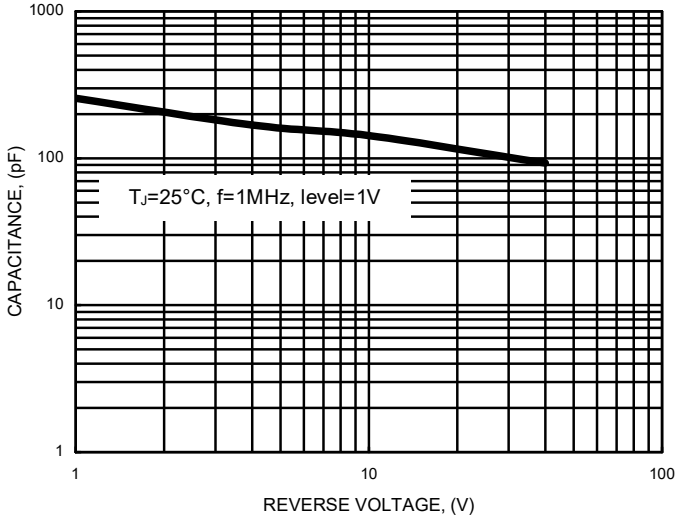
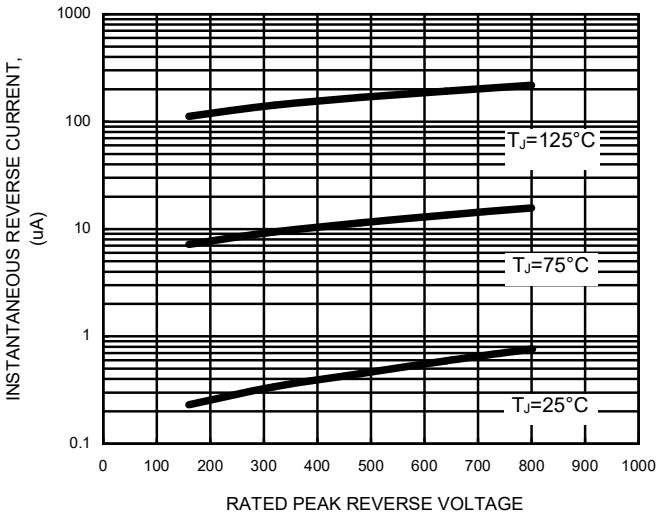


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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