

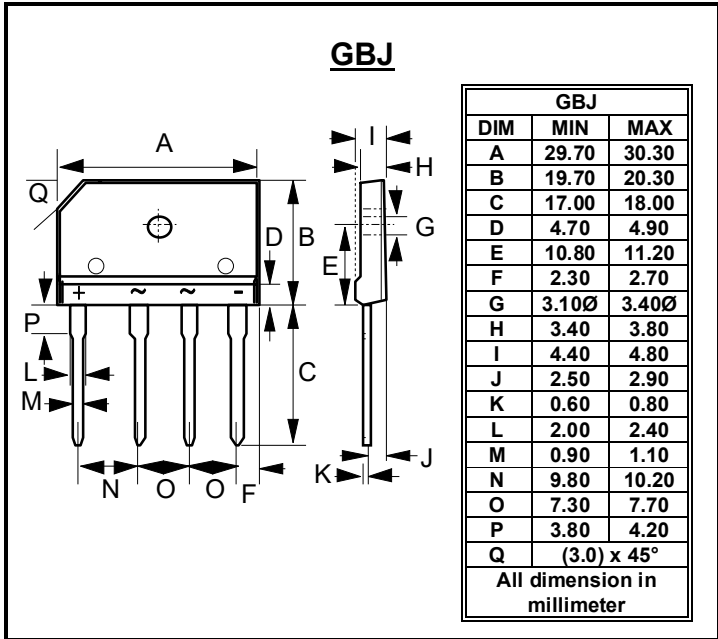
GLASS PASSIVATED BRIDGE RECTIFIERS	REVERSE VOLTAGE – 800 Volts FORWARD CURRENT – 25 Amperes
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FEATURES

- 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)



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	25 4.8	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	@ $T_A=25^\circ C$ @ $T_A=125^\circ C$ (Note1)	600 480	A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	@ $T_A=25^\circ C$ @ $T_A=125^\circ C$ (Note1)	1200 960	A
$I^2 t$ rating for fusing ($t = 8.3ms$)	$I^2 t$	1494	A ² S
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)	$I_F = 12.5A$ $T_A = 25^\circ C$ $T_A = 125^\circ C$ (Note1)	V_F	0.91 --	0.94 --	V
Leakage current	V_R at rated $T_A = 25^\circ C$ $T_A = 125^\circ C$ (Note1)	I_R	5 500		µA
Typical junction capacitance (Note 2)		C_J	168		pF

THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical thermal resistance (Note 3)	R_{thJc} R_{thJL} R_{thJA}	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



FIG.1- FORWARD CURRENT DERATING CURVE

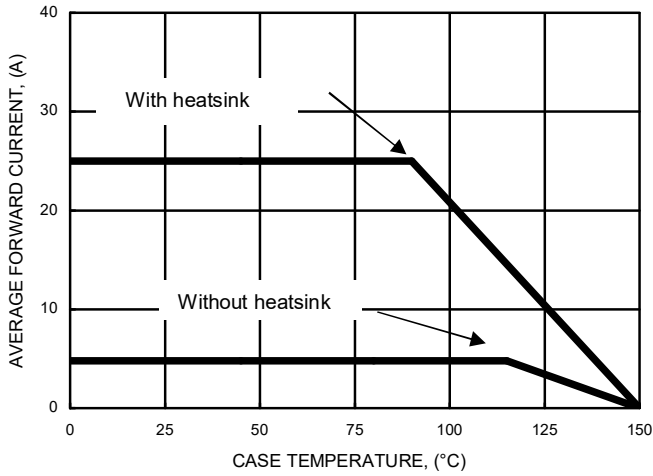


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

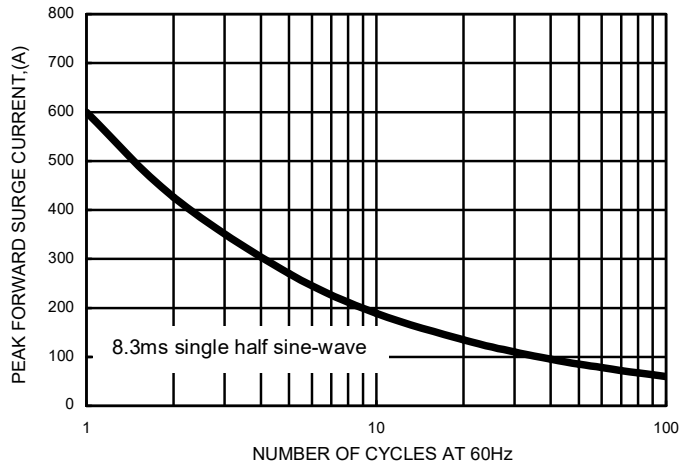


FIG.3- TYPICAL FORWARD CHARACTERISTICS

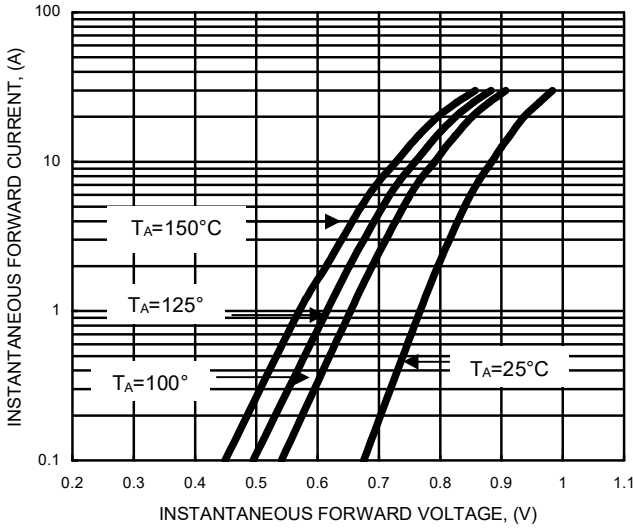


FIG.4- TYPICAL JUNCTION CAPACITANCE

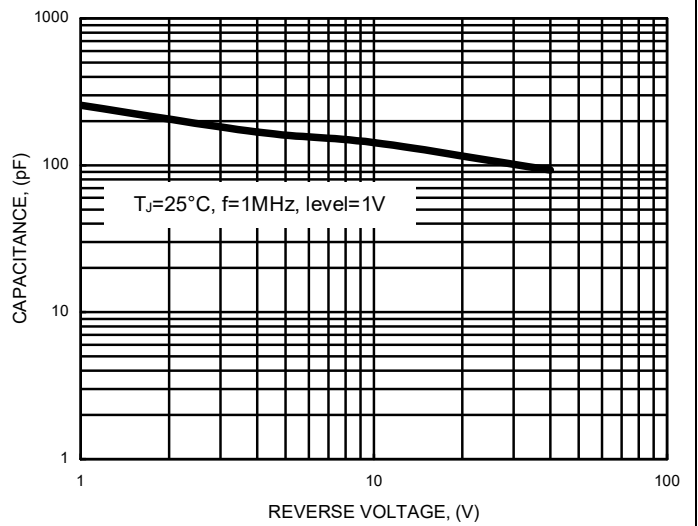
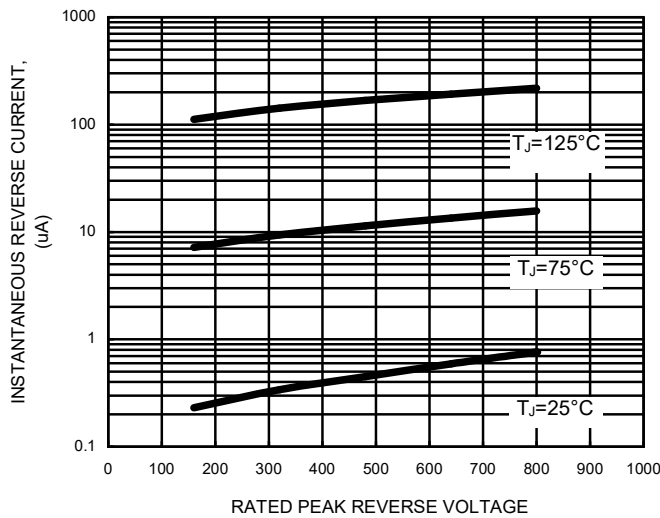


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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