

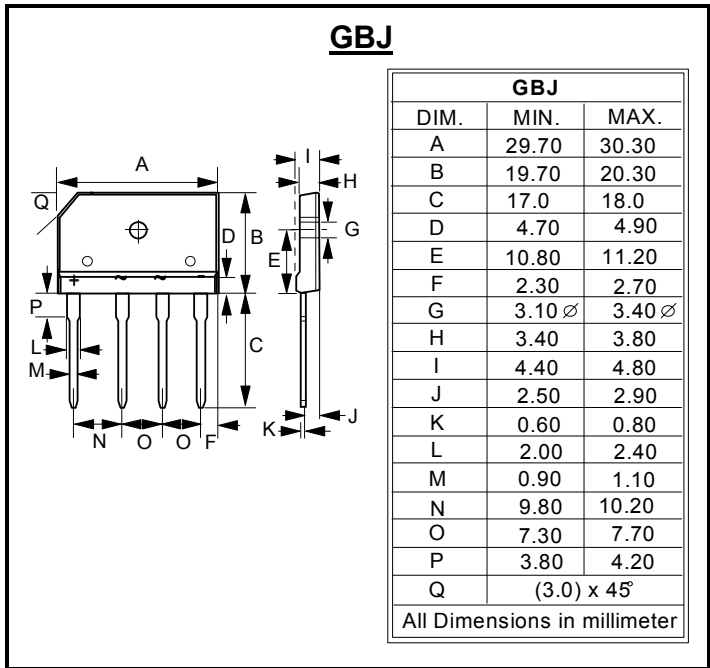
GLASS PASSIVATED BRIDGE RECTIFIERS **REVERSE VOLTAGE – 600Volts**
FORWARD CURRENT – 25 Amperes

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: 0.23 ounces, 6.6 grams
- Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GBJ25L06	UNIT			
Device marking code	Note	GBJ25L06	---			
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	600	V			
Average Rectified Output Current	$I_{F(AV)}$	25 4.5	A			
Peak Forward Surge Current 8.3ms single half sine-wave, $T_J=25^\circ\text{C}$	I_{FSM}	320	A			
$I^2 t$ Rating for fusing ($1\text{ms} \leq t < 8.3\text{ms}$)	$I^2 t$	425	A^2S			
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$			
Operating junction temperature range	T_J	-40 to +150	$^\circ\text{C}$			
PARAMETER	TEST CONDITIONS	SYMBOL	Min.	Typ.	Max.	UNIT
Breakdown voltage	$I_R=10\mu\text{A}$ $T_J=25^\circ\text{C}$	V_B	600	---	---	V
Forward Voltage (1)	$I_F=12.5\text{A}$ $T_J=25^\circ\text{C}$	V_F	---	0.87	0.92	V
Leakage Current	$V_R=600\text{V}$ $T_J=25^\circ\text{C}$	I_R	---	---	10	μA
THERMAL CHARACTERISTIC		SYMBOL	Typical			UNIT
Typical Junction Capacitance per element (Note 1)		C_j	150			pF
Reverse recovery time, $I_F=0.1\text{A}$, $I_R=0.1\text{A}$ per diode		t_{rr}	3			us
Typical thermal resistance_Junction to Case (2)		$R_{\theta JC}$	0.8			$^\circ\text{C/W}$
Typical thermal resistance_Junction to Lead (2)		$R_{\theta JL}$	5			$^\circ\text{C/W}$

Note :
1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 314mm x 314mm x 20mm Al Plate Heatsink.

FIG.1- FORWARD CURRENT DERATING CURVE

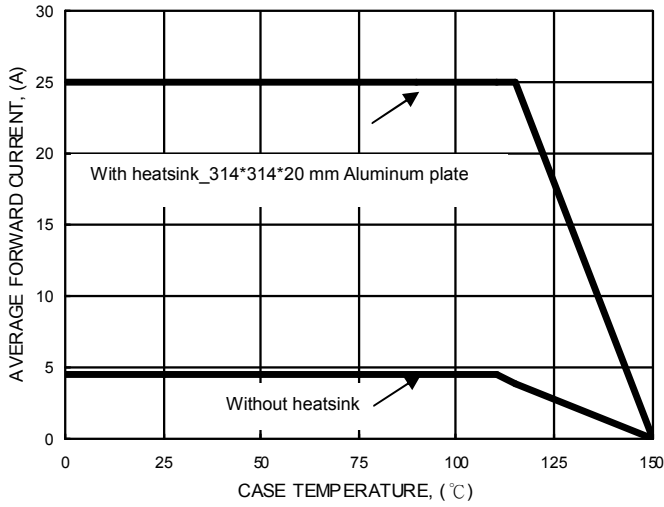


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

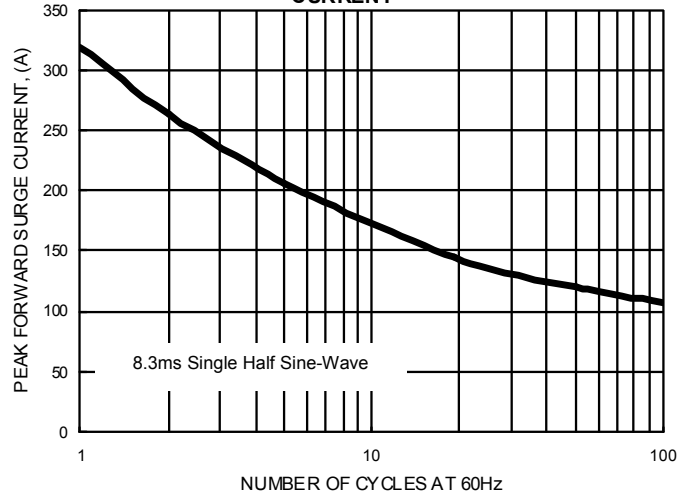


FIG.3- TYPICAL FORWARD CHARACTERISTICS

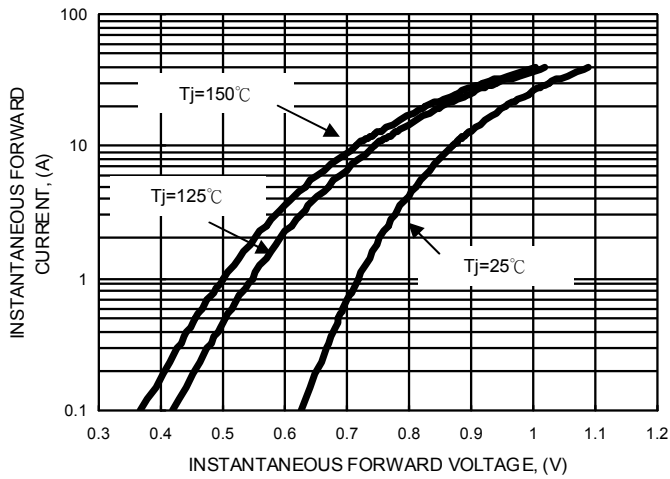


FIG.4- TYPICAL JUNCTION CAPACITANCE

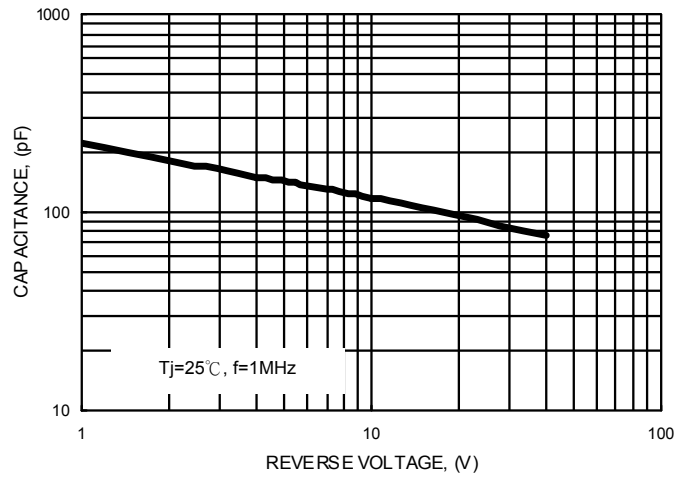


FIG.5- TYPICAL REVERSE CHARACTERISTICS

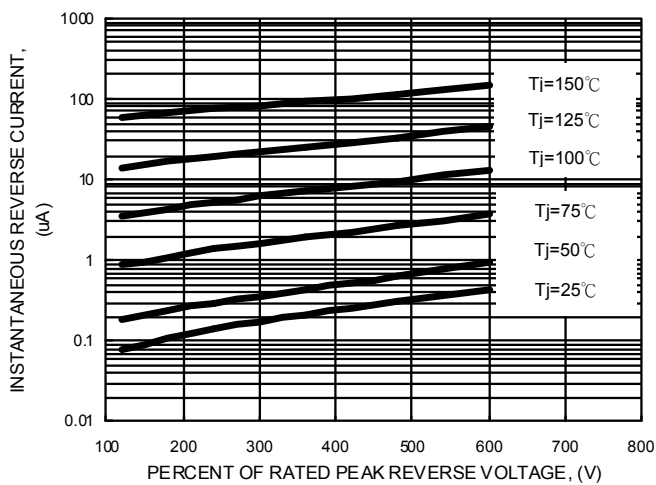
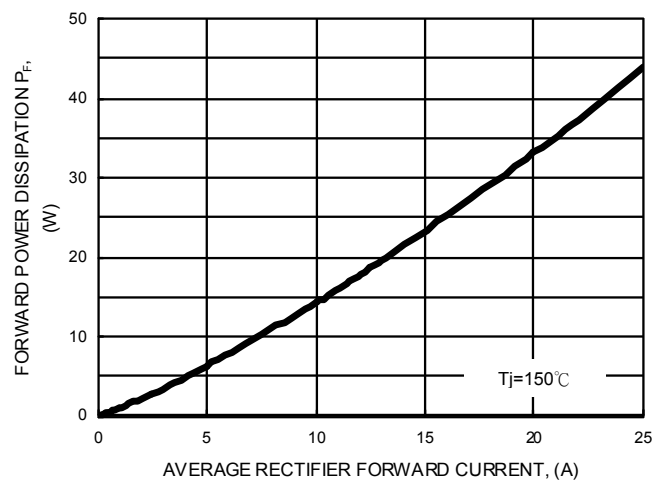


FIG.6- FORWARD POWER DISSIPATION



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.