

25Amp Silicon Bridge Rectifiers

FEATURES :

- Glass passivated chip junction
- High current capability
- Low forward voltage drop.
- High temperature soldering guaranteed 260 °C/10 seconds at terminals
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0,

MECHANICAL DATA :

- Case : Molded plastic, GBJ
- Epoxy: UL 94V-O rate flame retardant
- Terminals : Plated leads solderable per MIL-STD-750,method 2026
- Polarity : As Marked on Body
- Mounting Position : Any



MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ25010	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	25						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300						A
Rating for fusing(t=8.3ms)	I^2t	373						A ² s
Maximum Instantaneous Forward Voltage at 12.5A DC	V_F	1.10						V
Maximum DC reverse current at rated DC blocking voltage ($T_A=25\text{ °C}/125\text{ °C}$)	I_R	5 / 100						uA
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$	18 1.0						°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150						°C

RATINGS AND CHARACTERISTICS CURVES

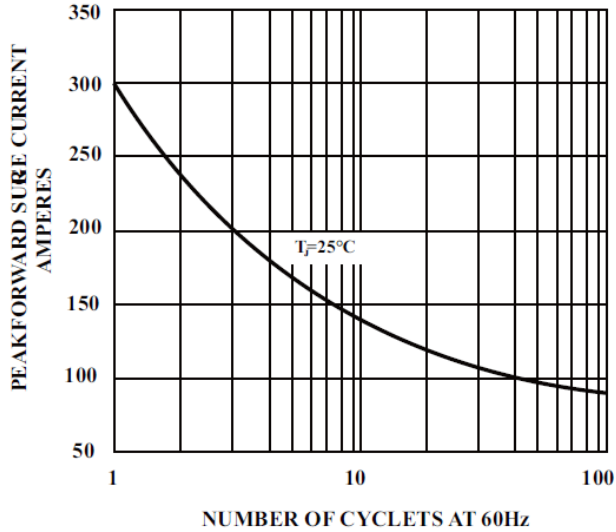


Figure 1. MAXIMUM FORWARD SURGE CURRENT

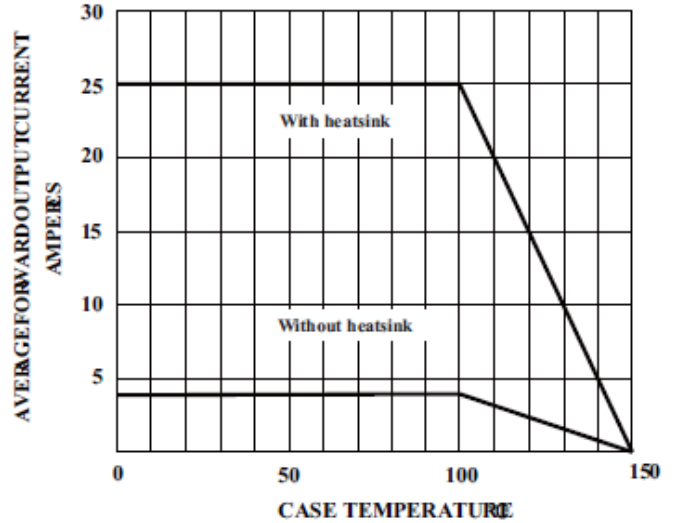


Figure 2. FORWARD CURRENT DERATING CURVE

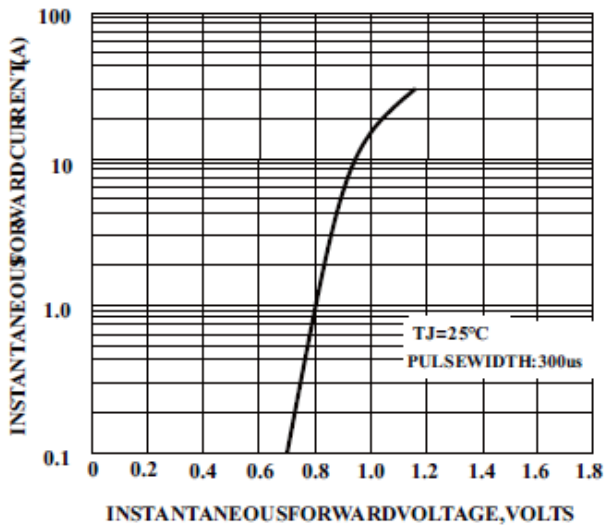


Figure 3. TYPICAL FORWARD CHARACTERISTICS

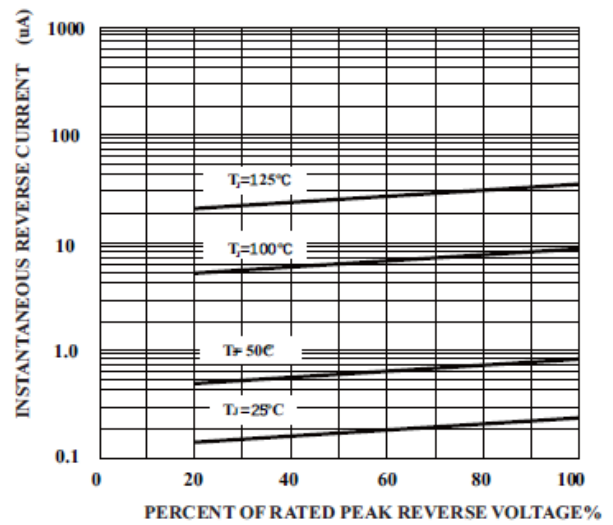
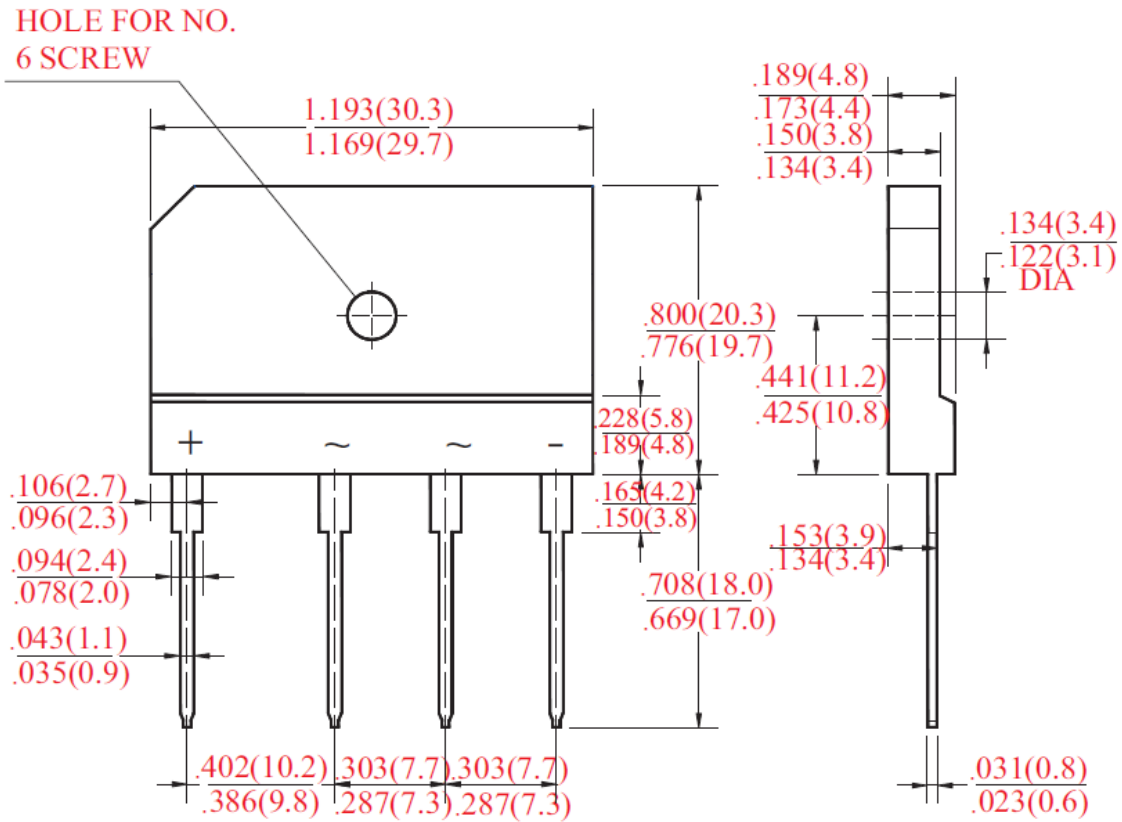


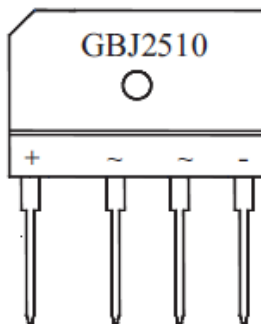
Figure 4. TYPICAL REVERSE CHARACTERISTICS

GBJ2501 THRU GBJ2510

·Package outlines : Dimensions in inches and (millimeters)



·Marking :



Part No	Marking code
GBJ2501	GBJ2501
GBJ2502	GBJ2502
GBJ2504	GBJ2504
GBJ2506	GBJ2506
GBJ2508	GBJ2508
GBJ2510	GBJ2510

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