

## FEATURES

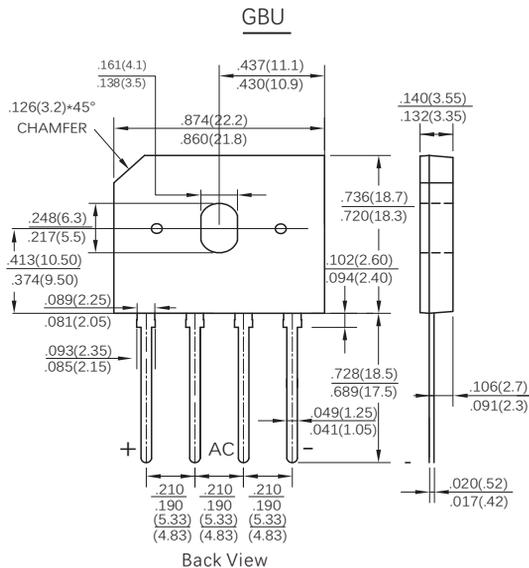
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability,Low forward voltage drop
- Soft recovery improves EMC performance
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU

## MECHANICAL DATA

- Case: GBU molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750,method 2026
- Mounting Position: Any

## TYPICAL APPLICATIONS

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C ambient temperature unless otherwise specified. Single phase ,half wave , resistive or inductive load. For capacitive load,derate current by 20%.)

Parameters	Symbol	EGBU2506	Units
Maximum Reverse Peak Reverse Voltage	$V_{RRM}$	600	Volts
Maximum RMS Voltage	$V_{RMS}$	420	Volts
Maximum DC Blocking Voltage	$V_{DC}$	600	Volts
Maximum Average Forward Rectified Current, (See Fig 2)	$I_{FAV}$	25.0	Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	220	Amps
Rating for Fusing (t =8.3ms)	$I^2t$	201	A <sup>2</sup> S
Maximum Instantaneous Forward Voltage at12.5A DC	$V_F$	1.70	Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_J = 25^\circ\text{C}$	5	$\mu\text{A}$
	$T_J = 125^\circ\text{C}$	100	$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	90	pF
Typical thermal resistance (Note 2)	Junction-Ambient	$R_{\theta JA}$	25
	Junction-Case	$R_{\theta JC}$	1.0
Maximum reverse recovery time(Note3)	$t_{rr}$	35	ns
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

NOTE: 1.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

2 Unit mounted on 50mm x 50mm x 1.6mm copper plate heatsink

3. Test conditions:  $I_s = 0.5A, I_r = 1.0A, I_{\theta} = 0.25A$ .

FIG.1-MAXIMUM FORWARD SURGE CURRENT

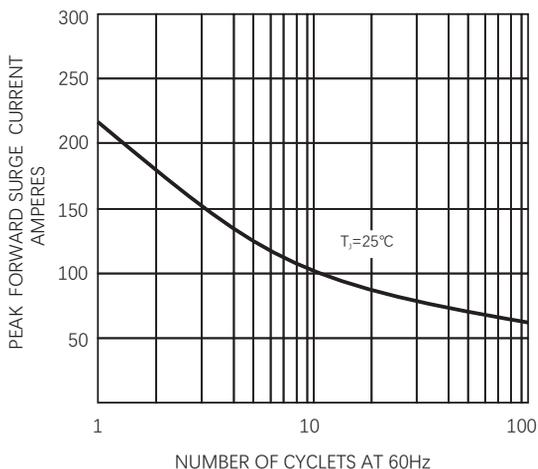


FIG.2 FORWARD CURRENT DERATING CURVE

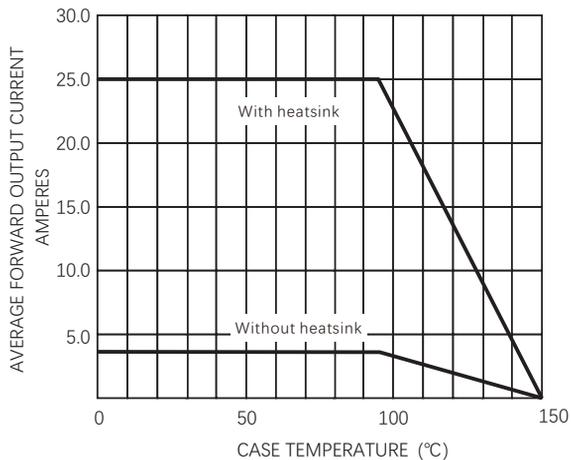


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

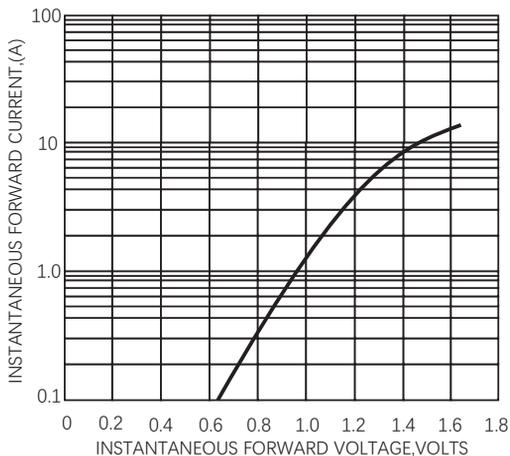
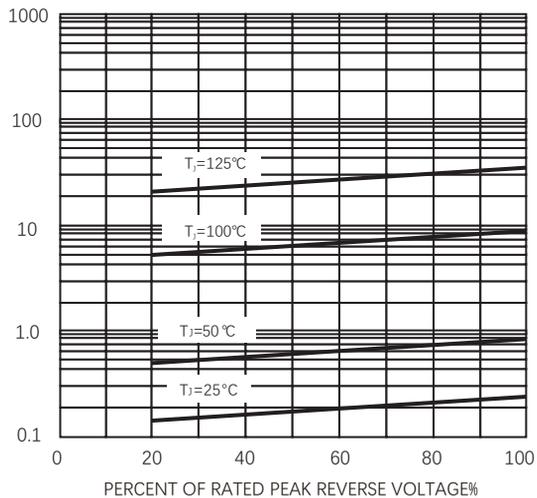


FIG.4 -TYPICAL REVERSE CHARACTERISTICS



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