

FEATURES

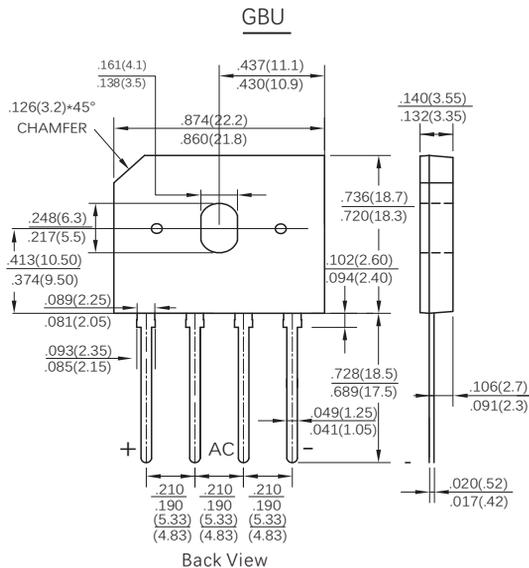
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High current capability,Low forward voltage drop
- Soft recovery improves EMC performance
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance 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	EGBU2503	Units
Maximum Reverse Peak Reverse Voltage	V_{RRM}	300	Volts
Maximum RMS Voltage	V_{RMS}	210	Volts
Maximum DC Blocking Voltage	V_{DC}	300	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}	240	Amps
Rating for Fusing (t =8.3ms)	I^2t	239	A ² S
Maximum Instantaneous Forward Voltage at12.5A DC	V_F	1.25	Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_j = 25^\circ\text{C}$	5	μA
	$T_j = 125^\circ\text{C}$	100	μA
Typical Junction Capacitance (Note 1)	C_j	175	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: $I_s = 0.5A, I_R = 1.0A, I_{RM} = 0.25A$.

FIG.1-MAXIMUM FORWARD SURGE CURRENT

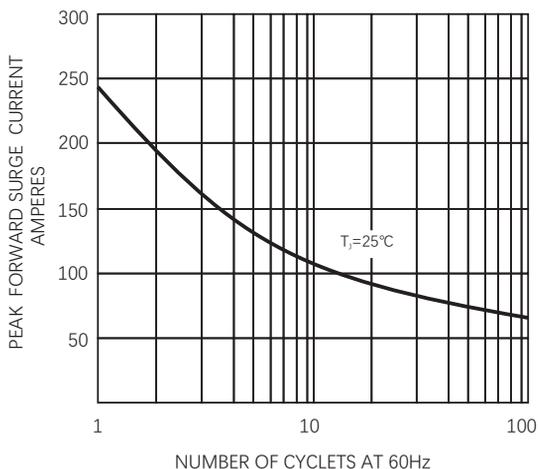


FIG.2 FORWARD CURRENT DERATING CURVE

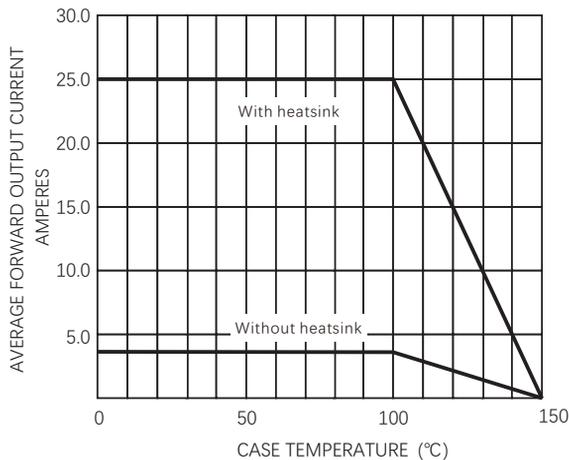


FIG. 3-TYPICAL FORWARD CHARACTERISTICS

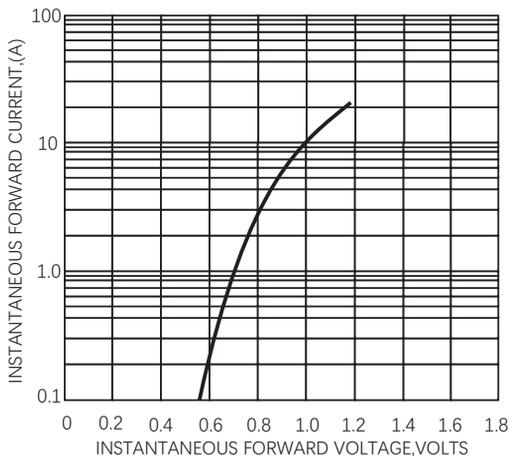
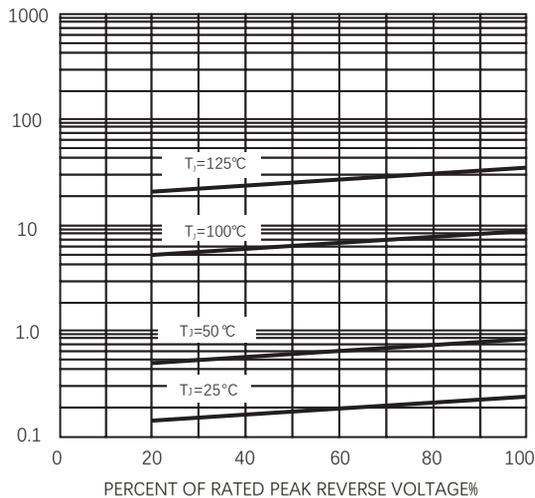


FIG.4 -TYPICAL REVERSE CHARACTERISTICS



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