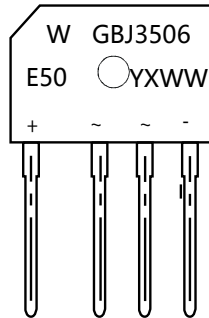


Special For DC-AC Rectifier Bridge



PINNING

| PIN | DESCRIPTION |
|-----|--------------------|
| 1 | Input Pin (~) |
| 2 | Input Pin (~) |
| 3 | Output Anode (+) |
| 4 | Output Cathode (-) |

Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:
260 °C/10sec

Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

Maximum Ratings and Electrical characteristics

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 %.

| Parameter | Symbol | GBJ3506E50 | Unit |
|--|------------------------------------|------------------------|------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 600 | V |
| Maximum RMS voltage | V_{RMS} | 420 | V |
| Maximum DC Blocking Voltage | V_{DC} | 600 | V |
| Average Rectified Output Current | I_o | 35.0 | A |
| Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$ | T_{rr} | 75 | ns |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 380 | A |
| $I^2 t$ rating for fusing (1ms < t < 8.3ms) | $I^2 t$ | 599 | A ² S |
| Dielectric Strength: Terminals to Case, AC 1 minute | V_{dis} | 2.5 | KV |
| Mounting torque | TOR | Recommended torque:0.5 | N.m |
| Maximum Forward Voltage at 17.5A | V_F | 1.95 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 10 500 | μA |
| Junction to ambient , without heatsink @ $T_A=25\text{ }^\circ C$ Junction to case, with heatsink @ $T_A=125\text{ }^\circ C$ | $R_{\theta JA}$ $R_{\theta JC}$ | 22 2.3 | $^\circ C/W$ |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | $^\circ C$ |

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1: Current Derating Curve

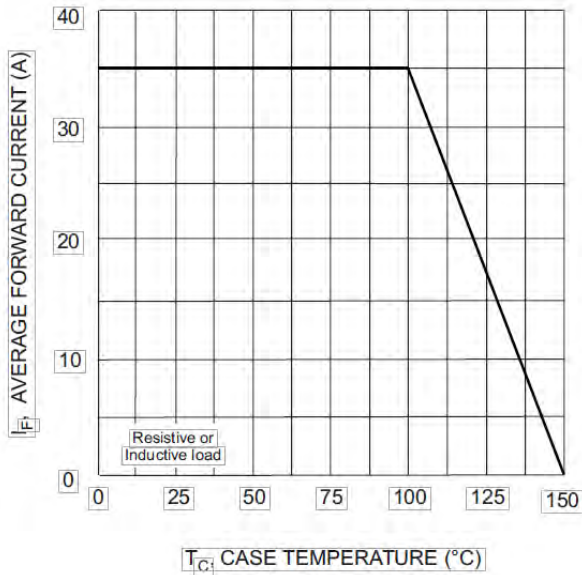


Fig.2 Typical Reverse Characteristics

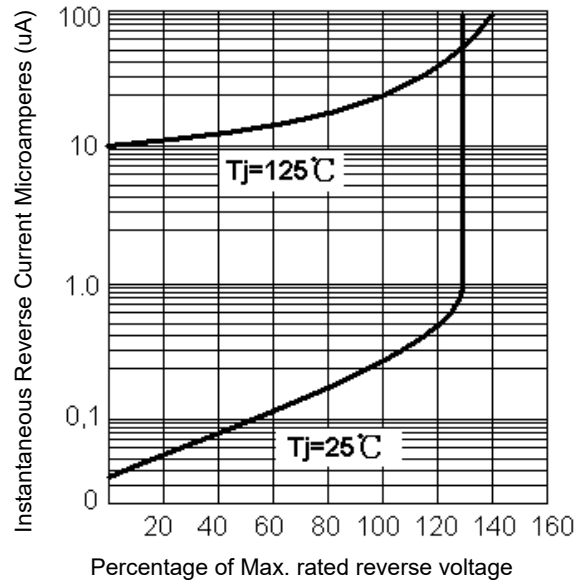


FIG3: Surge Forward Current Capability

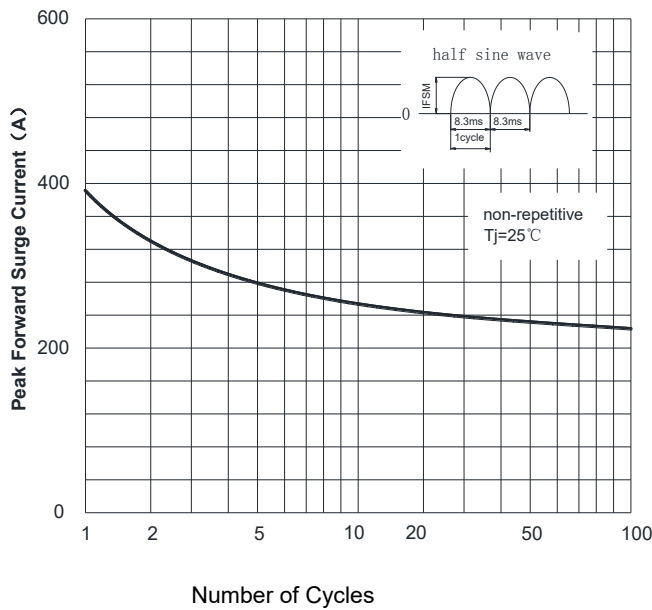
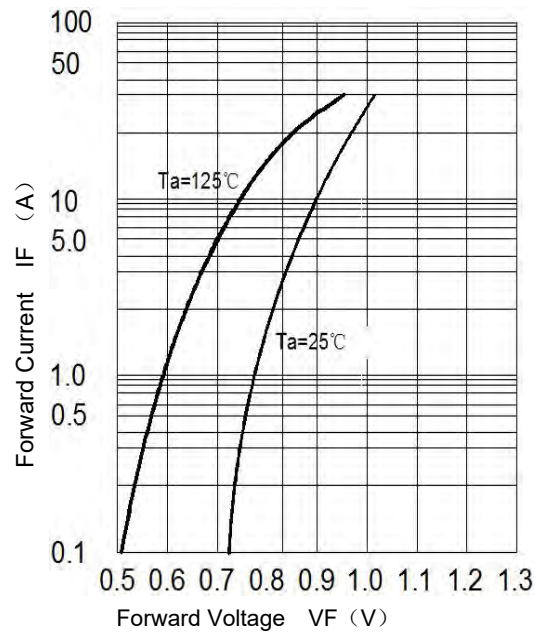
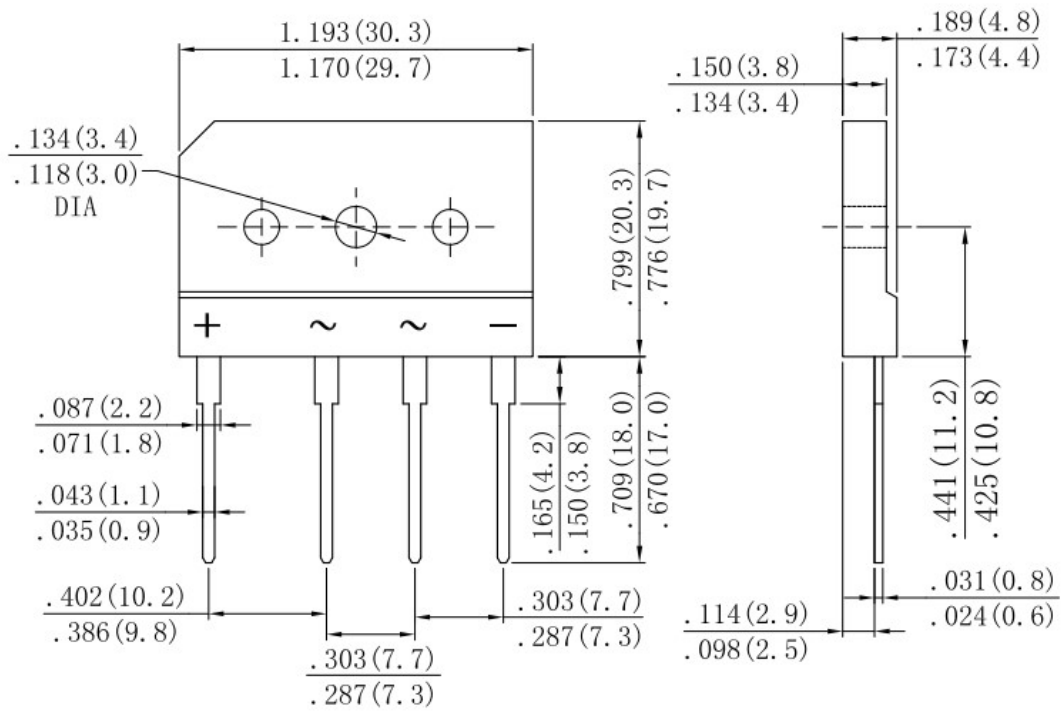


Fig.4: Rated Forward Features



PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)



Dimensions in inches and(millimeters)