

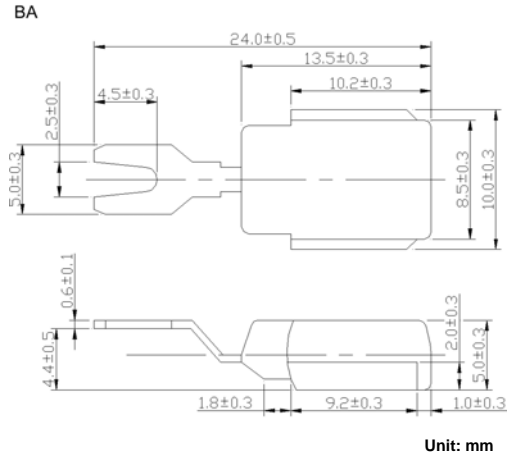
## Technical Specification:

### Features:

- ◆ High power capability
- ◆ Economical
- ◆ Avalanche Voltage: 37V to 41V

### Mechanical Data:

- ◆ Copper cup with transfer molded plastic
- ◆ Epoxy: UL94-0 rate flame retardant
- ◆ Polarity: GBA35M-P lead-P  
GBA35M-N lead-N
- ◆ Glass passivated chip or o-j chip
- ◆ Technology vacuum soldered
- ◆ Lead: Plated lead, solderable per MIL-STD-202E method 208C
- ◆ Weight: 0.094 ounces, 2.65 grams



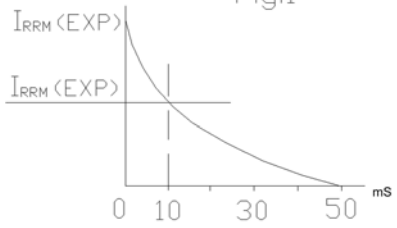
## Maximum Ratings and Electrical Characteristics

- ◆ Rating at 25°C ambient temperature unless otherwise specified.
- ◆ Single phase, half wave, 60Hz, resistive or inductive load.
- ◆ For capacitive load derate current by 20%.

| Parameters  | Symbols              | GBA35M-P / GBA35M-N |         |          | Units            |
|---|----------------------|---------------------|---------|----------|------------------|
|   |                      | Min.                | Nominal | Max.     |                  |
| DC peak repetitive reverse voltage  | $V_{RRM}$            |                     | 32      |          | Volts            |
| Working peak reverse voltage  | $V_{RHM}$            |                     | 32      |          |                  |
| DC blocking voltage   | $V_R$                |                     | 32      |          |                  |
| Average rectified forward current at $T_c=125^\circ\text{C}$  | $I_T$                |                     | 35      |          | Amps             |
| Repetitive peak reverse surge current<br>$T_c=80\text{m sec duty cycle } <1\%$                                      | $I_{TSM}$            |                     | 35      |          | Amps             |
| Breakdown voltage ( $V_{BR}$ @ $I_F=100\text{mA}$ )<br>$I_F=90\text{Amps}, T_c=150^\circ\text{C}, PW=80\text{usec}$ | $V_{BR}$<br>$V_{BR}$ | 37                  | 39      | 41<br>54 | Volts            |
| Forward voltage drop ( $V_{sd}$ ) @ $I_F=100\text{Amps}<300\text{usec}$   | $V_F$                | 0.98                | 1.05    | 1.10     | Volts            |
| Peak forward surge current  | $I_{FSM}$            |                     | 400     |          | Amps             |
| Reverse leakage ( $I_R=32\text{Vdc}$ ) $T_A=25^\circ\text{C}$   | $I_R$                | 0.2                 | 1.0     | 2.0      | $\mu\text{A}$    |
| Operating and storage junction temperature range  | $T_J, T_{STG}$       | -65 to +175         |         |          | $^\circ\text{C}$ |

**Notes:** 1. Enough heatsink must be considered in application.

Fig.1



Surge current characteristics