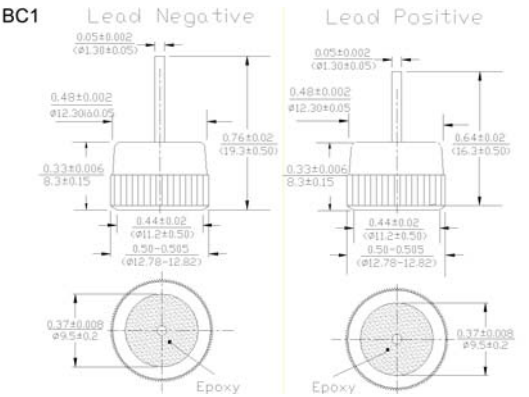
# GAAB40M

Press Fit Avalanche Automotive Rectifier (BOSCH)
Avalanche Voltage 37 to 41Volts  Current 40 Amps

## Technical Specification:

### Features:

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




**Dimensions in inches and (millimeters)**

### Mechanical Data:

- Case: Copper case
- Epoxy: UL94-0 rate flame ratardant
- Polarity: As marked of case bottom
- Glass passivated chip
- Technology vacuum soldered
- Lead: Plated lead, solderable per MIL-STD-202E method 208C
- Weight: 0.28 ounces, 8.05 grams

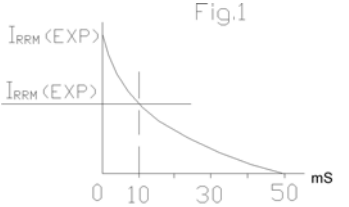
## ■Maximum Ratings and Electrical Characteristics

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

| Electrical Characteristics @ 25°C | Symbols | Min. | Nominal | Max. | Units |
|---|---|---|---|---|---|
| Peak repetitive reverse voltage<br>Working peak reverse voltage<br>DC blocking voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_{DC}$ | | 28<br>28<br>28 | | Volts |
| Average rectified forward current at $T_C$=125°C | $I_O$ | | 40 | | Amps |
| Repetitive peak reverse surge current<br>$T_C$=10m sec duty cycle <1% | $I_{RSM}$ | | 40 | | Amps |
| Breakdown voltage ($V_{br}$ @ $I_T$=100mA, $T_C$=25°C)<br>$I_T$=90Amps, $T_C$=150°C, PW =80usec | $V_{br1}$<br>$V_{br2}$ | 37 | 39 | 41<br>54 | Volts |
| Forward voltage drop ($V_{fm}$) @ $I_F$=100Amps<300usec | $V_F$ | 0.98 | 1.05 | 1.08 | Volts |
| Peak forward surge current | $I_{FSM}$ | | 500 | | Ampes |
| Reverse leakage ($V_R$=28Vdc) $T_A$=25°C | $I_R$ | 0.2 | 1.0 | 2.0 | uA |
| Operating junction and storage temperature range | $T_J$, $T_{STG}$ | | -65 to +175 | | °C |

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

Fig.1




Surge current characteristics