



# PRESS FIT AVALANCHE AUTOMOTIVE RECTIFIER (BOSCH)

APRB40L

AVALANCHE VOLTAGE 20 to 24 Volts

CURRENT 40 Amperes

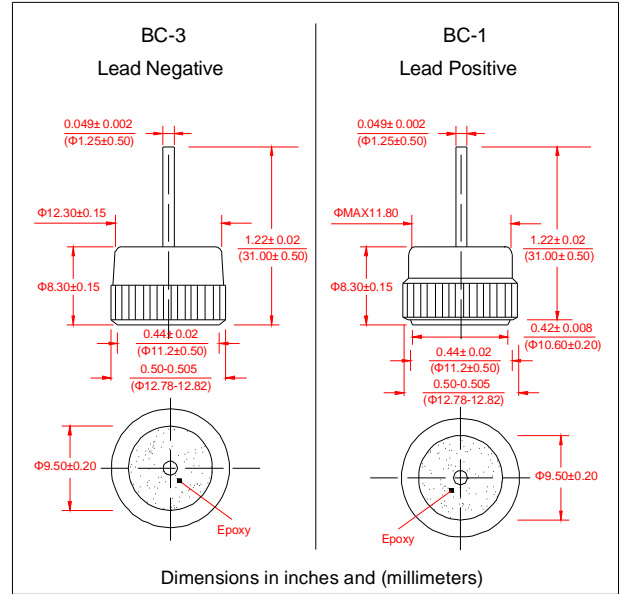
## Technical Specification:

### Features:

- High power capability
- Economical
- Avalanche Voltage: 20V to 24V
- Glass passivated chip

### MECHANICAL DATA

- Case: Copper case
- Epoxy: UL94-0 rate flame retardant
- Polarity: As marked of case bottom
- Technology vacuum soldered
- Lead: Plated slug, solderable per MIL-STD-202E Method 208C
- Weight: 0.28ounce, 7.86 Grams



### 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 derate current by 20%

| Electrical Characteristics @ 25°C                                     | SYMBOLS        | MIN | NOMINAL     | MAX  | UNITS |
|---|----------------|-----|-------------|------|-------|
| Peak Repetitive Reverse Voltage                                       | $V_{RRM}$      |     | 17          |      | Volts |
| Working Peak Reverse Voltage  | $V_{RRM}$      |     | 17          |      |       |
| DC Blocking Voltage   | $V_{DC}$       |     | 17          |      |       |
| Average Rectified Forward Current ( $T_c=125^\circ C$ )               | $I_o$          |     | 40          |      | Amps  |
| Repetitive Peak Reverse Surge Current<br>$T_c=10msec$ Duty Cycle < 1% | $I_{RSM}$      |     | 40          |      | Amps  |
| Breakdown Voltage ( $V_{br@ir=100mA}$ , $T_c=25^\circ C$ )            | $V_{br1}$      | 20  | 22          | 24   | Volts |
|   | $V_{br2}$      |     |             | 32   | Volts |
| Forward Voltage Drop @ $I_f=100Amps < 300uSec$                        | $V_F$          |     | 1.05        | 1.08 | Volts |
| Peak Forward Surge Current  | $I_{FSM}$      |     | 500         |      | Amps  |
| Reverse Leakage ( $V_R=17Vdc$ ) $T_A=25^\circ C$                      | $I_R$          |     | 1.0         | 2.0  | uAmps |
| Operating and Storage Junction Temperature Range                      | $T_J, T_{STG}$ |     | -65 to +175 |      | °C    |

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

