# BLOCK TYPE AVALANCHE AUTOMOTIVE RECTIFIER

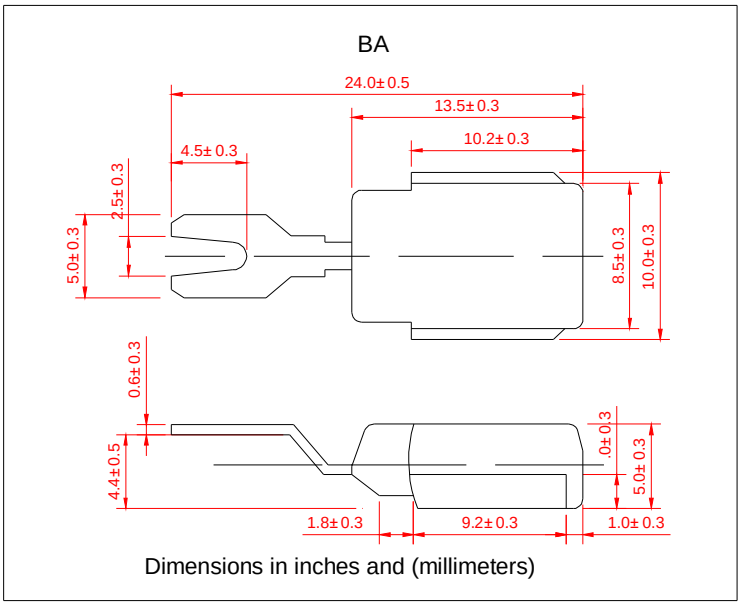
## BA30L

**AVALANCHE VOLTAGE** **20 to 24 Volts**
**CURRENT** **30 Amperes**

### Technical Specifecation:

### Features:

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




### MECHANICAL DATA

- Copper cup with transfer molded plastic
- Epoxy: UL94-0 rate flame ratardant
- Polarity: BA30L-P lead-P
  BA30L-N lead-N
- Technology vacuum soldered
- Lead: Plated slug, solderable per MIL-STD-202E Method 208C
- Weight: 0.094 ounce 2.65 Grams

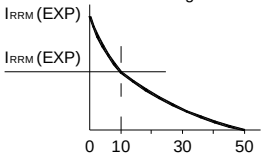
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25℃ ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

| | | BA30L-P/BA30L-N | | | |
|---|---|---|---|---|---|
| Electrical Characteristics @ 25℃ | SYMBOLS | MIN | NOMINAL | MAX | UNITS |
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RRM}$<br>$V_{DC}$ | | 17<br>17<br>17 | | Volts |
| Average Rectified Forward Current (Tc=125℃) | Io | | 30 | | Amps |
| Repetitive Peak Reverse Surge Current<br>Tc=10msec Dury Cycle＜1% | $I_{RSM}$ | | 30 | | Amps |
| Breakdown Voltage (Vbr@ir=100mA, Tc=25℃)<br>Ir=90Amps, Tc=150℃, PW=80usec | Vbr1<br>Vbr2 | 20 | 22 | 24<br>32 | Volts<br>Volts |
| Forward Voltage Drop @If=100Amps＜300usec | $V_F$ | | 1.05 | 1.10 | Volts |
| Peak Forward Surge Current | $I_{FSM}$ | | 400 | | Amps |
| Reverse Leakage ($V_R$=17Vdc) $T_A$=25℃ | $I_R$ | | 1.0 | 2.0 | uAmps |
| Operating and Storage Junction Temperature Range | $T_J$ ,$T_{STG}$ | | -65 to +175 | | ℃ |

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

Fig.1




Surge current characteristics

**E-mail: sales@cnmic.com** **Web Site: www.cnmic.com**