



# BLOCK TYPE AVALANCHE AUTOMOTIVE RECTIFIER

**BA50M**

**AVALANCHE VOLTAGE 37 to 41 Volts**

**CURRENT 50 Amperes**

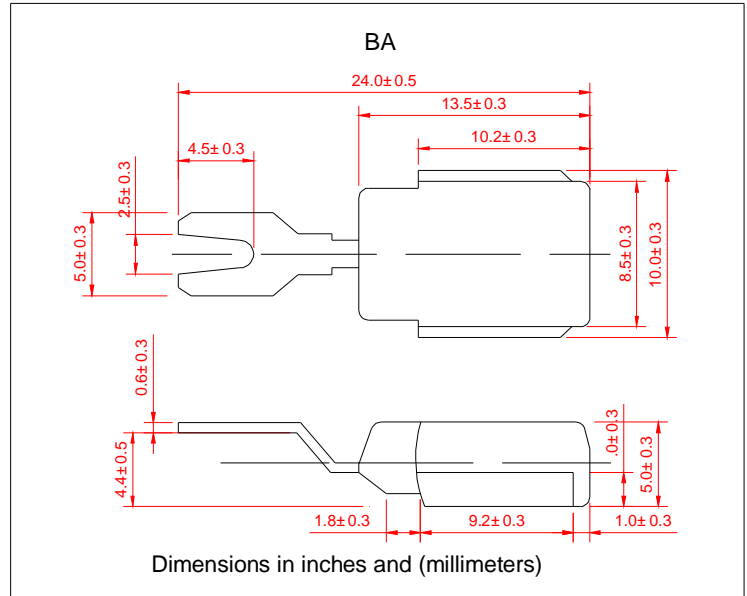
**Technical Specifecation:**

**Features:**

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

**MECHANICAL DATA**

- Copper cup with transfer molded plastic
- Epoxy: UL94-0 rate flame ratardant
- Polarity: BA50M-P lead-P  
BA50M-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°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

		BA50M-P/BA50M-N			
Electrical Characteristics @ 25°C	SYMBOLS	MIN	NOMINAL	MAX	UNITS
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	28			Volts
Working Peak Reverse Voltage	V <sub>RRM</sub>	28			
DC Blocking Voltage	V <sub>DC</sub>	28			
Average Rectified Forward Current (T <sub>c</sub> =125°C)	I <sub>o</sub>	50			Amps
Repetitive Peak Reverse Surge Current T <sub>c</sub> =10msec Dury Cycle<1%	I <sub>RSM</sub>	50			Amps
Breakdown Voltage (V <sub>br</sub> @I <sub>r</sub> =100mA, T <sub>c</sub> =25°C)	V <sub>br1</sub>	37	39	41	Volts
I <sub>r</sub> =90Amps, T <sub>c</sub> =150°C, PW=80usec	V <sub>br2</sub>			54	Volts
Forward Voltage Drop @I <sub>f</sub> =100Amps<300usec	V <sub>F</sub>	1.05			Volts
Peak Forward Surge Current	I <sub>FSM</sub>	600			Amps
Reverse Leakage (V <sub>R</sub> =17Vdc) T <sub>A</sub> =25°C	I <sub>R</sub>	1.0			uAmps
Operating and Storage Junction Temperature Range	T <sub>J</sub> ,T <sub>STG</sub>	-65 to +175			°C

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

