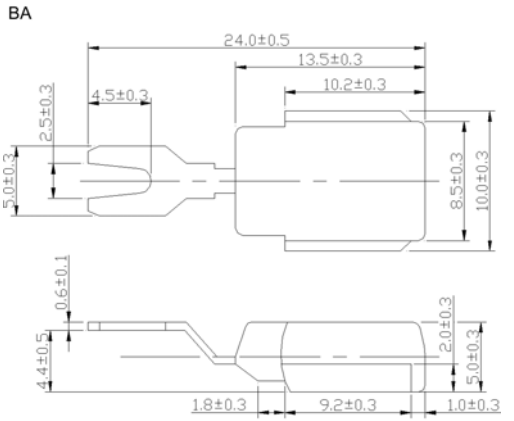
GBA50

Block Type Avalanche Automotive Rectifier
Voltage Range 20 Volts Current 50 Amps

Technical Specification:

Features:

- High power capability
- Economical
- Avalanche Voltage: 24V to 32V



Unit: mm

Mechanical Data:

- Copper cup with transfer molded plastic
- Epoxy: UL94-0 rate flame ratardant
- Polarity: GBA50-P lead-P
  GBA50-N lead-N
- Glass passivated chip
- Technology vacuum soldered
- Lead: Plated lead, solderable per MIL-STD-202E method 208C
- Weight: 0.094 ounces, 2.65 grams

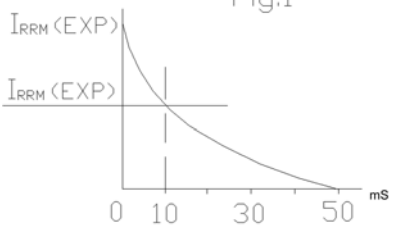
■Maximum Ratings and Electrical Characteristics

- 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	GBA50-P /GBA50-N			Units
		Min.	Nominal	Max.	
DC peak repetitive reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R		20 20 20		Volts
Average rectified forward current at T_C=125°C	I_O		50		Amps
Repetitive peak reverse surge current T_C=10msec duty cycle <1%	I_{RSM}		50		Amps
Breakdown voltage (V_{br}@ I_F=100mA) I_F=90Amps, T_C=150°C, PW=80usec	V_{br1} V_{br2}	24	25/27	32 40	Volts
Forward voltage drop (V_{fwd})@ I_F=100Amps<300usec	V_F	0.98	1.05	1.08	Volts
Peak forward surge current	I_{FSM}		600		Ampes
Reverse leakage (V_R=20Vdc) T_A=25°C	I_R	0.2	1.0	2.0	uA
Operating and storage junction temperature range	T_J, T_{STG}		-65 to +175		°C

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

Fig.1



Surge current characteristics