

Pb Free Plating Product

GBA40LP/GBA40LN



40 Ampere Avalanche Type Block Rectifier Diodes for Mitsubishi Alternator

Feature:

- ◆ Low leakage
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High forward surge current capability

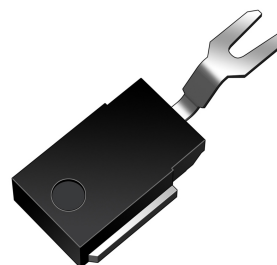
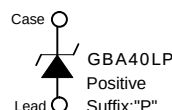
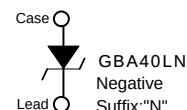
Application:

- ◆ Block Diode/Alternator Diode with AEC-Q101 Grade Quality
- ◆ Stack Silicon Diffused Diode alternative
- ◆ Special for Automotive AC Alternator rectifier application

Mechanical Data:

- ◆ Technology: Latest Glass Passivation Pellet/Cu Clip Bonding
- ◆ Case: Vacuum soldered/Sintered temperature < 260°C
- ◆ Cathode Polarity: As marked on body
- ◆ Lead: Plated lead, solderable per MIL-STD-202E method 208C
- ◆ Mounting: BLOCK/TO-230/BA/MR/K series package type

BLOCK/TO-230/BA/MR/K series

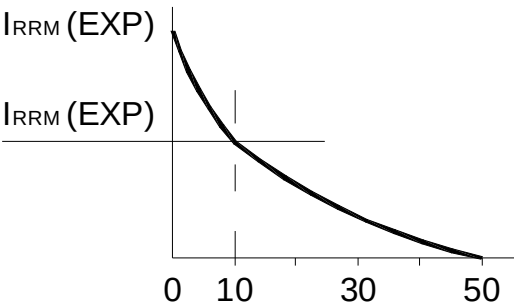


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

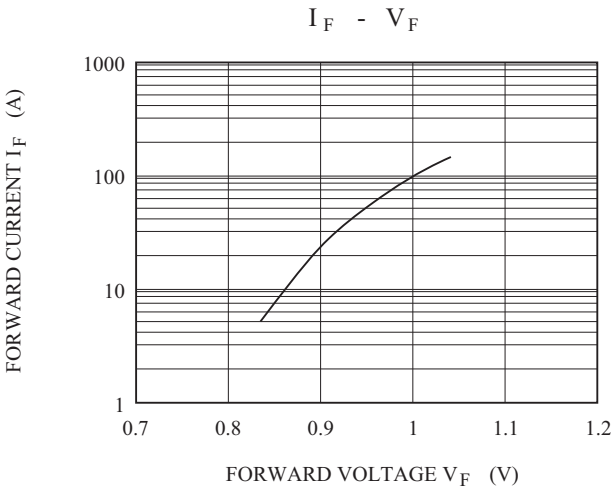
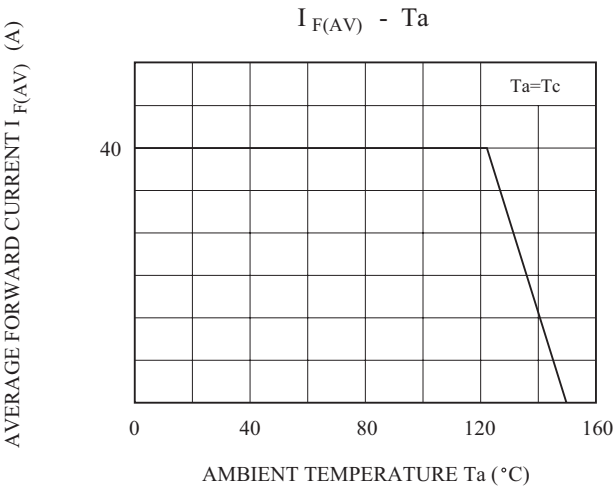
- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

		GBA40LP/GBA40LN			
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 Transient Peak Reverse Voltage	V _{DC} V _{RSM}		17		
Average Rectified Forward Current (Tc=125°C)	I _o		40		Amps
Repetitive Peak Reverse Surge Current Tc=10msec Dury Cycle<1%	I _{RSM}		40		Amps
Breakdown Voltage (Vbr@ir=100mA, Tc=25°C)	Vbr1 V _z	20	22	24	Volts
Ir=90Amps, Tc=150°C, PW=80usec Zener Voltage	Vbr2			32	Volts
Forward Voltage Drop @If=100Amps<300usec	V _F		1.05	1.10	Volts
Peak Forward Surge Current	I _{FSM}		500		Amps
Reverse Leakage (V _R =17Vdc) T _A =25°C	I _R		1.0	2.0	uAmps
Operating and Storage Junction Temperature Range	T _J ,T _{STG}	-65 to +175			°C

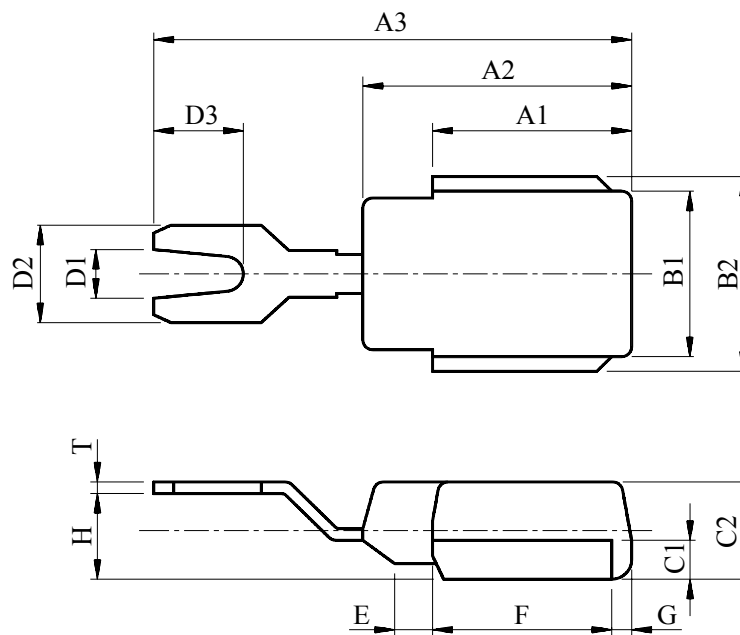
Notes: 1. Enough heatsink must be considered in application.



Surge current characteristics



BLOCK/TO-230/BA/MR/K Series Package Outline



DIM	MILLIMETERS	DIM	MILLIMETERS
A1	10.0±0.3	D2	5.0±0.3
A2	13.5±0.3	D3	4.5±0.3
A3	24.0±0.5	E	1.9±0.3
B1	8.5±0.3	F	9.0±0.3
B2	10.0±0.3	G	1.0±0.3
C1	2.0±0.3	H	4.4±0.5
C2	5.0±0.3	T	0.6±0.3
D1	2.5±0.3		