LB1SBL thru LB10SBL

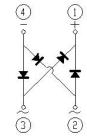
GOOD-ARK Flectronics

Reverse Voltage 100~1000V Output Current 1.0A

Features

- Case:ABF
- Glass passivated Fast Recovery bridge rectifiers
- Ideal for automated placement
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10s
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21 definition





ABF

Typical Applications

• For use of general purpose AC to DC bridge rectification in power supply, charger, office appliance, home appliance and telecome device.

Mechanical Data

- Case:ABF, Epoxy meets UL-94V-0 Flammability rating Base P/N with suffix"E" on packing code-halogen free
- Terminals:Matte tin plated Idads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As markde on body

| Maximum Ratings (TA = 25 °C unless otherwise noted) | | | | | | | | | |
|--|-------------|-----------------------------------|--------------|--------|--------|--------|--------|---------|--------------------|
| Parameter | | Symbol | LB1SBL | LB2SBL | LB4SBL | LB6SBL | LB8SBL | LB10SBL | Unit |
| Maximum repetitive peak reverse voltage | | V _{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | | VRMS | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | | V _{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average output rectified current | | l _{o(AV)} | 1.0 | | | | | | Α |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | | IFSM | 50 | | | | | | Α |
| Rating for fusing(t<8.3ms) | | I ² t | 10.4 | | | | | | A ² sec |
| Operating junction and storage temperature range | | T _J , T _{STG} | - 55 to +150 | | | | | | °C |
| Typical junction capacitance | 4.0 V, 1MHz | CJ | 10 | | pF | | | | |



LB1SBL thru LB10SBL GOOD-ARK Electronics

| Electrical Characteristics (TA = 25 °C unless otherwise noted) | | | | | | | | | |
|--|--------------------|-----------------|--------|--------|--------|--------|--------|---------|-------|
| Parameter | Test Conditions | Symbol | LB1SBL | LB2SBL | LB4SBL | LB6SBL | LB8SBL | LB10SBL | Unit |
| Maximum instantaneous forward voltage | IF=1.0A TA=25°C | V _F | | | 1 | .0 | | | Volts |
| Maximum DC reverse current at | TA=25°C | | 10.0 | | | | | | |
| rated DC blocking voltage | TA=125°C | I _R | 100 | | | | | | μΑ |
| Typical thermal resistance ⁽¹⁾ | | $R_{\theta JA}$ | 80 | | | | | | |
| | | $R_{\theta JL}$ | 25 | | | | | °C /W | |

Notes:1. Mounted on FR-4 P.C.B Board

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Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED **CURRENT**

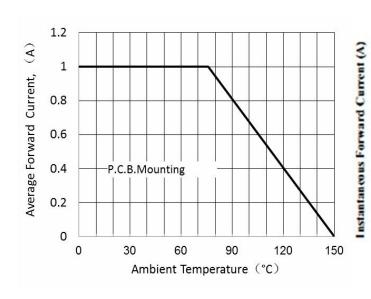
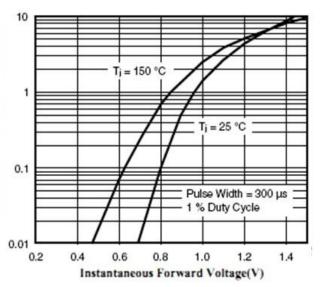


FIG.2-TYPICAL INSTANTANEOUS **FORWARD CHARACTERISITCS**

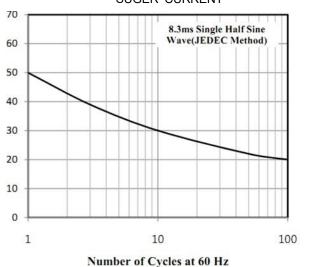


CHARACTERISTICS 2.5 2 TJ=150° C 1.5

FIG.3-TYPICAL REAK REVERSE VOLTAGE

Forward Power Dissipation(W) Peak Forward Surge current(A) 1 0.5 0 0 0.4 0.6 0.8 1 1.2 Average Rectified Forward Current(A)

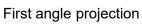
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT

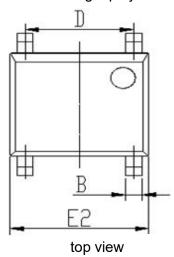


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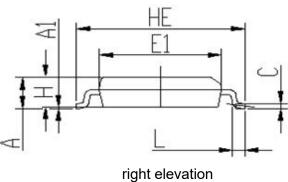
Package Outline Dimensions

in inches (millimeters)





| MIN MAX MIN MA A 1.25 1.35 0.049 0.05 A1 0.00 0.15 0.000 0.00 B 0.50 0.70 0.020 0.02 C 0.15 0.30 0.006 0.01 | 53 |
|---|-------------|
| A1 0.00 0.15 0.000 0.00 B 0.50 0.70 0.020 0.02 | |
| B 0.50 0.70 0.020 0.02 | |
| | 16 |
| C 0.15 0.30 0.006 0.01 | 28 |
| | 2 |
| D 3.80 4.20 0.150 0.16 | |
| E1 4.40 4.60 0.173 0.18 | 31 |
| E2 5.00 5.20 0.197 0.20 |)5 |
| L 0.25 0.65 0.010 0.02 | 26 |
| HE 6.00 6.40 0.236 0.25 | 52 |
| H 1.20 1.30 0.047 0.05 | 51 |



Revision History

| Document Version | Date of release | Discroption of changes |
|------------------|-----------------|------------------------|
| Rev.A | 2021/3/21 | Released Datasheet |
| Rev.B | 2023/12/17 | Modify document format |



LB1SBL thru LB10SBL

GOOD-ARK Electronics

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