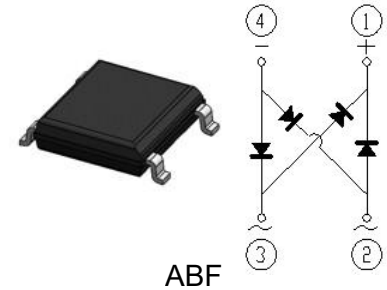


Reverse Voltage 100~1000V Output Current 1.5A

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, 10 s
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Halogen-free according to IEC 61249-2-21 definition



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 leads, solderable per J-STD-002B and JESD22-B102D
- Polarity:As markde on body

Maximum Ratings (TA = 25 °C unless otherwise noted)

| Parameter | Symbol | LB151SL | LB152SL | LB154SL | LB156SL | LB158SL | LB1510SL | Unit | |
|--|----------------|---------------|---------|---------|---------|---------|----------|--------------------|----|
| Maximum repetitive peak reverse voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS voltage | V_{RMS} | 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 | $I_{O(AV)}$ | 1.5 | | | | | | A | |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I_{FSM} | 50 | | | | | | A | |
| Rating for fusing($t < 8.3ms$) | I^2t | 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, 1 MHz | C_J | 25 | | | | | | pF |

| Electrical Characteristics (TA = 25 °C unless otherwise noted) | | | | | | | | | |
|---|--------------------|------------------|---------|---------|---------|---------|---------|----------|-------|
| Parameter | Test Conditions | Symbol | LB151SL | LB152SL | LB154SL | LB156SL | LB158SL | LB1510SL | Unit |
| Maximum instantaneous forward voltage | IF=1.5A TA=25°C | V _F | 1.1 | | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage | TA=25°C | I _R | 10.0 | | | | | | μA |
| | TA=125°C | | 100 | | | | | | |
| Typical thermal resistance ⁽¹⁾ | | R _{θJA} | 80 | | | | | | °C /W |
| | | R _{θJC} | 10 | | | | | | |
| | | R _{θJL} | 25 | | | | | | |

Notes:1. Mounted on FR-4 P.C.BBoard

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

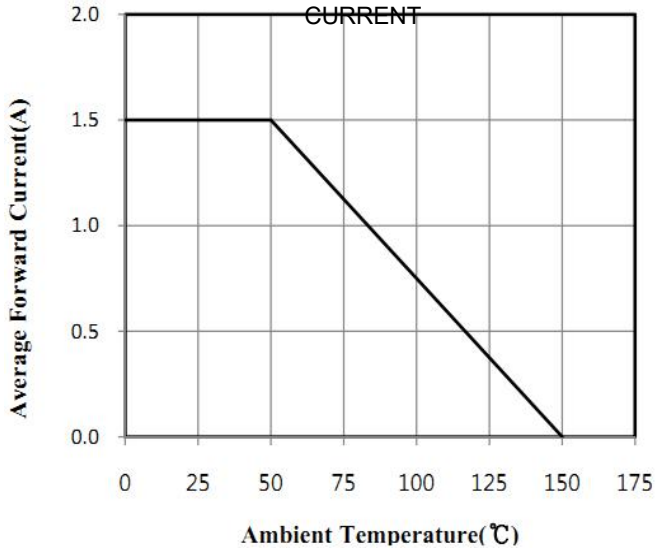


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

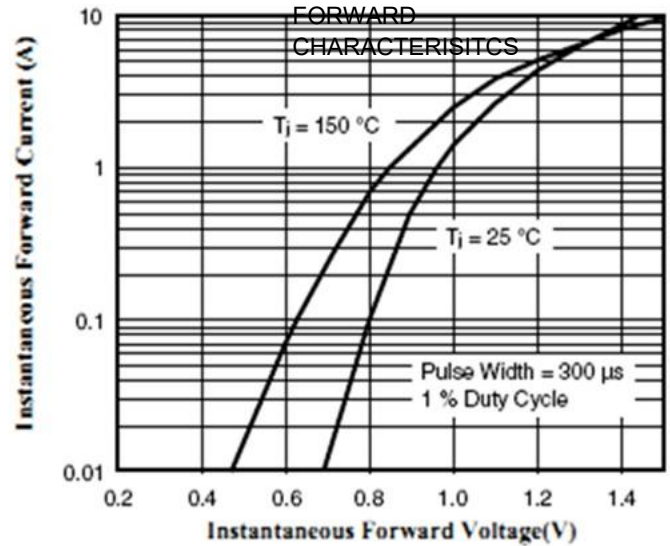


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

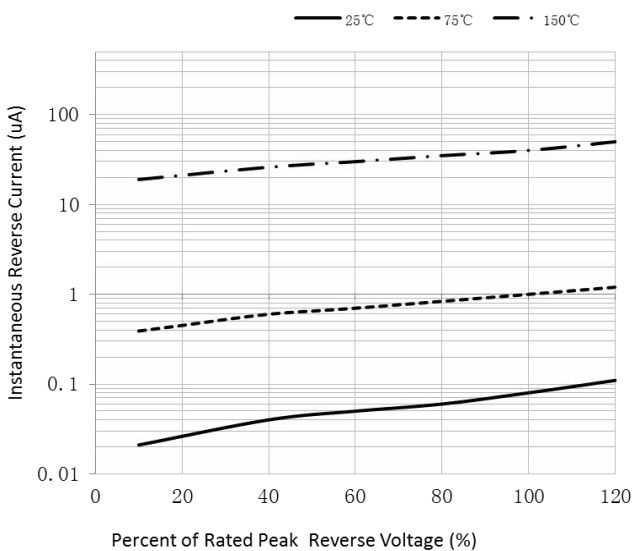
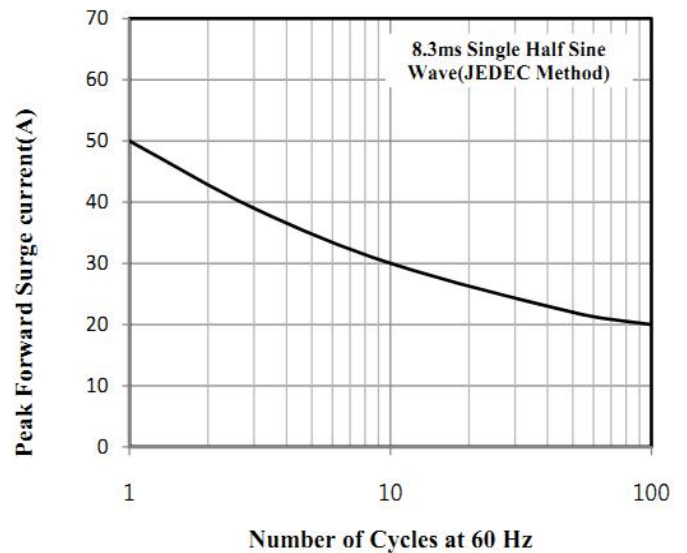


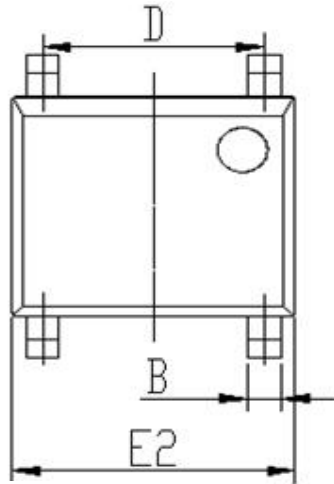
FIG.4-MAXIMUM NON-REPETITIVE PEAK FORWARDSUGER CURRENT



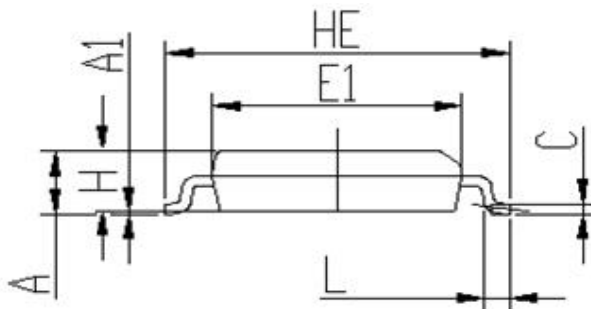
Package Outline Dimensions

in inches (millimeters)

First angle projection



top view



right elevation

| DIM | Unit: mm | | Unit: inch | |
|-----|----------|------|------------|-------|
| | MIN | MAX | MIN | MAX |
| A | 1.25 | 1.35 | 0.049 | 0.053 |
| A1 | 0.00 | 0.15 | 0.000 | 0.006 |
| B | 0.50 | 0.70 | 0.020 | 0.028 |
| C | 0.15 | 0.30 | 0.006 | 0.012 |
| D | 3.80 | 4.20 | 0.150 | 0.165 |
| E1 | 4.40 | 4.60 | 0.173 | 0.181 |
| E2 | 5.00 | 5.20 | 0.197 | 0.205 |
| L | 0.25 | 0.65 | 0.010 | 0.026 |
| HE | 6.00 | 6.40 | 0.236 | 0.252 |
| H | 1.20 | 1.30 | 0.047 | 0.051 |

Revision History

| Document Version | Date of release | Discription of changes |
|------------------|-----------------|------------------------|
| Rev.A | 2021/3/1 | Released Datasheet |
| Rev.B | 2023/12/17 | Modify document format |

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