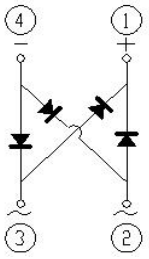
Reverse Voltage 100~1000V Output Current 1.5A

Features



ABF

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

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

Parameter		Symbol	LBR151S	LBR152S	LBR154S	LBR156S	LBR158S	LBR1510S	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^2sec
Operating junction and storage temperature range		T_J, T_{STG}	- 55 to + 150						°C
Typical reverse recovery time	I_F=0.5A,I_R=1.0A, Irr=0.25A	T_{rr}	150			250	500		nS
Typical junction capacitance	4.0 V, 1 MHz	C_J	15						pF

Electrical Characteristics (TA = 25 °C unless otherwise noted)										
Parameter	**Test Conditions**	**Symbol**	**LBR151S**	**LBR152S**	**LBR154S**	**LBR156S**	**LBR158S**	**LBR1510S**	**Unit**
Maximum instantaneous forward voltage	IF=1.5A TA=25°C	V_F	1.3						Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I_R	5.0						μA
	TA=125°C		50						
Typical thermal resistance(1)		$R_{\theta JA}$	80						°C /W
		$R_{\theta JC}$	25						

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

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

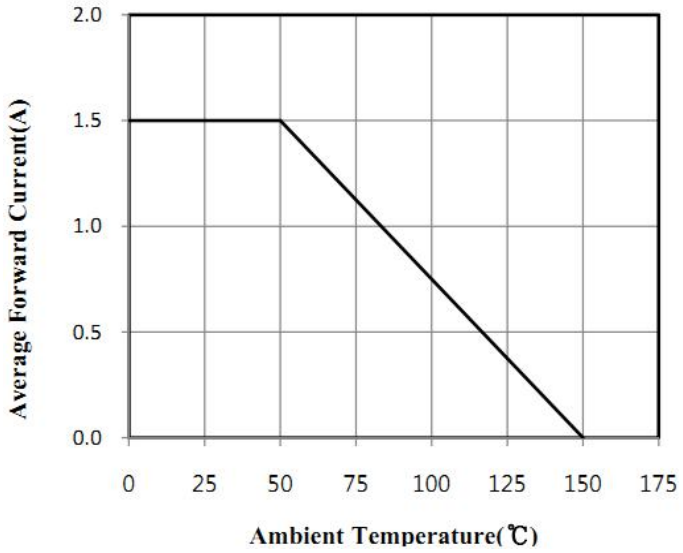


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

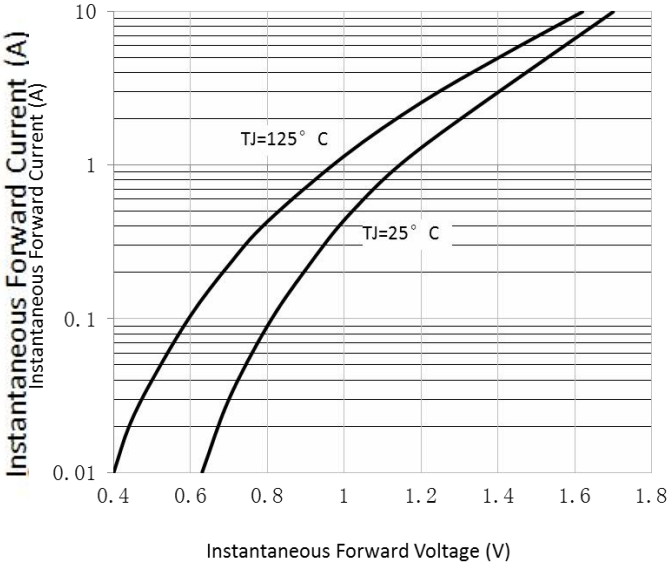


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

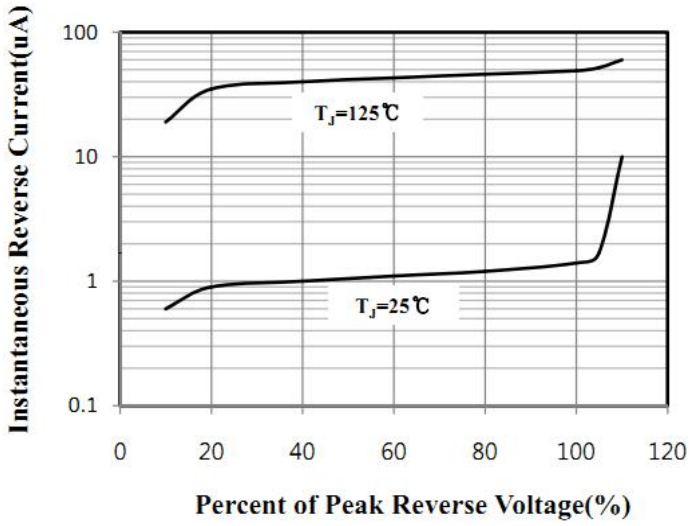
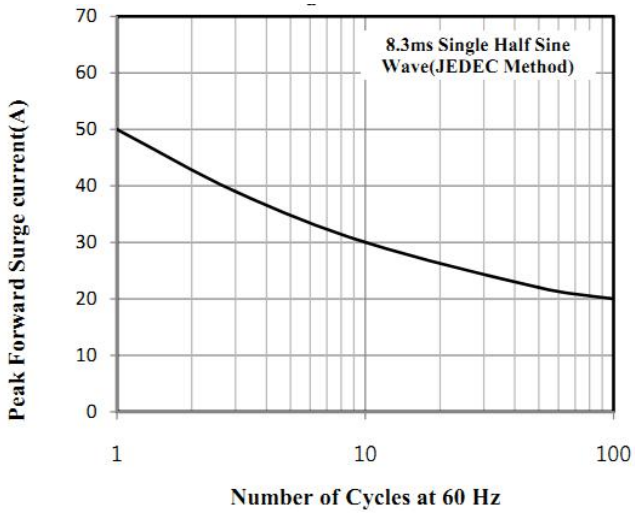


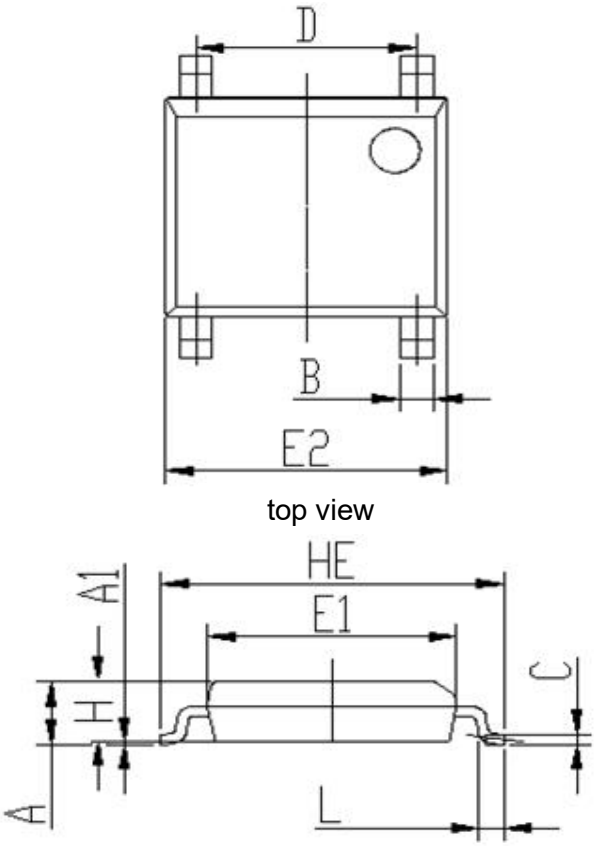
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT



Package Outline Dimensions

in inches (millimeters)

First angle projection



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	Discroption of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/17	Modify document format

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