

## <u>LBR201S thru LBR2010S</u>

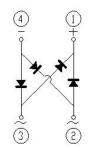
**GOOD-ARK Electronics** 

### Reverse Voltage 100~1000V Output Current 2.0A

#### **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, 10 s
- 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	LBR201S	LBR202S	LBR204S	LBR206S	LBR208S	LBR2010S	Unit
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	100	200	400	600	800	1000	٧
Maximum RMS voltage		V <sub>RMS</sub>	70	140	280	420	560	700	V
Maximum DC blocking voltage		V <sub>DC</sub>	100	200	400	600	800	1000	V
Maximum average output rectified current		I <sub>o(AV)</sub>	2.0						Α
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	60						А
Rating for fusing(t<8.3ms)		l <sup>2</sup> t	15.0						A <sup>2</sup> sec
Operating junction and storage temperature range		T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150						°C
Typical reverse recovery time	IF=0.5A,IR=1.0A , Irr=0.25A	T <sub>rr</sub>	150 250 500		500	nS			
Typical junction capacitance	4.0 V, 1 MHz		15			pF			



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Electrical Characteristics (TA = 25 °C unless otherwise noted)									
Parameter	Test Conditions	Symbol	LBR201S	LBR202S	LBR204S	LBR206S	LBR208S	LBR2010S	Unit
Maximum instantaneous forward voltage	IF=2.0A TA=25°C	V <sub>F</sub>	1.3					Volts	
Maximum DC reverse currentat rated DC blocking voltage	TA=25°C		5.0						
	TA=125°C	I <sub>R</sub>	500						
Typical thermal resistance <sup>(1)</sup>		$R_{\theta JA}$	80						
		$R_{\theta JC}$	25						°C /W
	R <sub>eJL</sub>	20							

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



0

25

50

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#### Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

2.5 2 1.5 1 0.5

FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

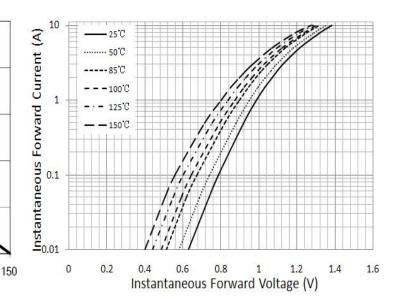


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

75

Ambient Temperature(℃)

100

125

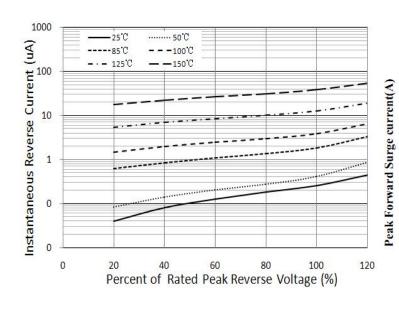
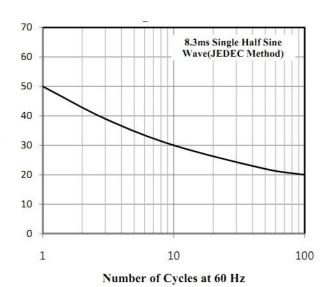


FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT

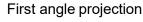


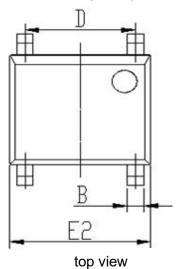
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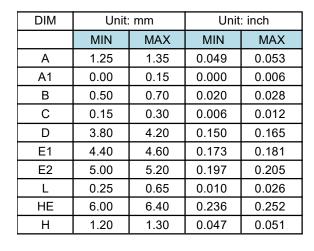
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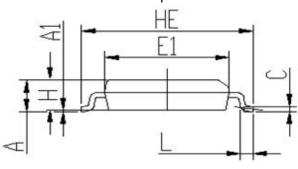
#### **Package Outline Dimensions**

in inches (millimeters)









right elevation

### **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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