



# SEMICONDUCTOR TECHNICAL DATA

## LB2S ~ LB10S

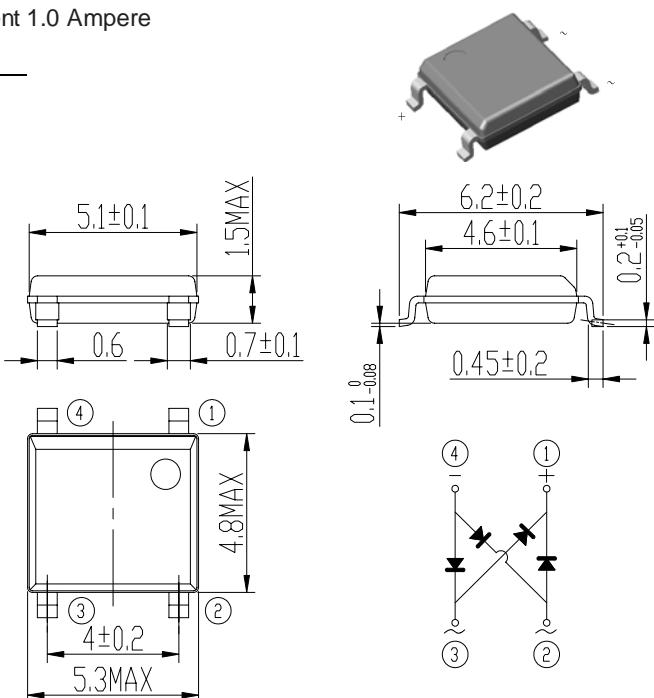
Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifiers  
Reverse Voltage 200 to 1000 Volts Forward Current 1.0 Ampere

### Features

- ◆ Low Profile: Typical height of 1.4mm
- ◆ Ideal for automated placement
- ◆ High surge current capability
- ◆ Solder Dip 260°C, 40seconds

### Mechanical Data

- ◆ Case:SOPA-4  
Epoxy meets UL-94V-0 Flammability rating
- ◆ Terminals:Matte tin plated Idads, solderable p  
J-STD-002B and JESD22-B102D
- ◆ Polarity:As markde on body



### Maximum Ratings and Electrical Characteristics

(T<sub>A</sub>=25 °C unless otherwise noted)

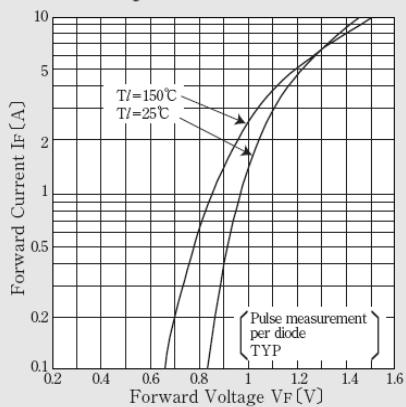
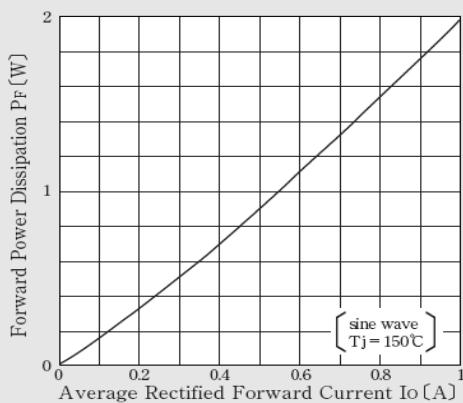
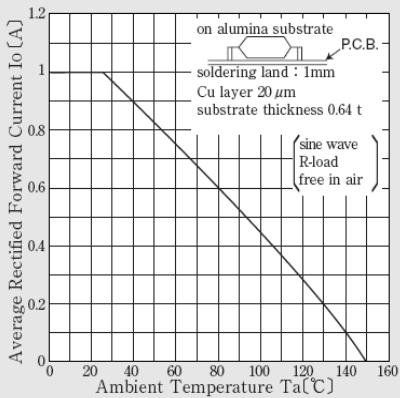
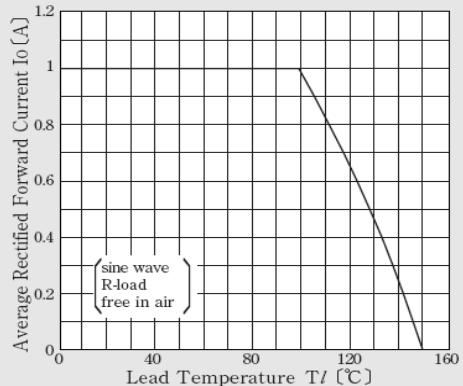
Parameter	Symbols	LB2S	LB4S	LB6S	LB8S	LB10S	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	Volts
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	700	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	Volts
Maximum average forward output rectified current (see Fig.1) on glass-epoxy P.C.B. on aluminum substrate	I <sub>F(AV)</sub>			0.8			Amp
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>			30			Amps
Rating for fusing (t < 8.3ms)	I <sub>f</sub>			3			A <sup>2</sup> sec
Maximum instantaneous forward voltage drop per leg at 0.4A	V <sub>F</sub>			0.95			Volt
Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>R</sub>			5.0			uA
Typical thermal resistance per leg (Note 1)	R <sub>θJA</sub> R <sub>θUL</sub>			85			°C/W
Typical junction capacitance per leg at 4.0V, 1.0MHz	C <sub>J</sub>			13			pF
Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>			-55 to +150			°C

Notes 1. Device mounted P.C.B with 0.47x0.47"(12mmx12mm) Copper Pads.

2. JEDEC registered values

**RATINGS AND CHARACTERISTIC CURVES**

(TA=25°C unless otherwise noted)

**Forward Voltage**

**Forward Power Dissipation**

**Derating Curve  $T_a$ - $I_o$** 

**Derating Curve  $T_l$ - $I_o$** 

**Peak Surge Forward Current Capability**
