

# Zibo Seno Electronic Engineering Co., Ltd.



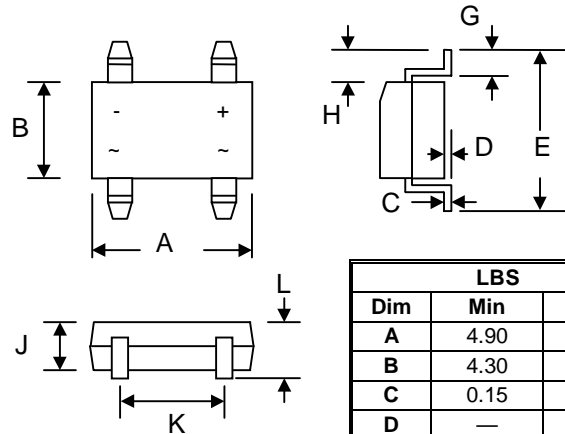
## LLB05S – LLB10S



### 0.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

#### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material – UL Flammability 94V-0



LBS		
Dim	Min	Max
A	4.90	5.10
B	4.30	4.60
C	0.15	0.25
D	—	0.15
E	6.00	6.40
G	0.30	0.70
H	0.90	1.10
J	—	1.50
K	3.90	4.10
L	1.22	1.42
All Dimensions in mm		

#### Mechanical Data

- Case: LBS, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

#### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Characteristic	Symbol	LLB05S	LLB1S	LLB2S	LLB4S	LLB6S	LLB8S	LLB10S	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Working Peak Reverse Voltage	$V_{RWM}$									
DC Blocking Voltage	$V_R$									
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V	
Average Rectified Output Current (Note 1) @ $T_A = 40^\circ\text{C}$	$I_o$	0.5								A
Average Rectified Output Current (Note 2) @ $T_A = 40^\circ\text{C}$		0.8								
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	5.0								$\text{A}^2\text{s}$
Forward Voltage per element @ $I_F = 0.5\text{A}$	$V_{FM}$	1.0								V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_{RM}$	5.0								$\mu\text{A}$
		150								
Typical Junction Capacitance per leg (Note 3)	$C_j$	13								pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	62.5								$^\circ\text{C/W}$
		20								
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +150								$^\circ\text{C}$

Note: 1. Mounted on glass epoxy PC board with  $1.3\text{mm}^2$  solder pad.  
2. Mounted on aluminum substrate PC board with  $1.3\text{mm}^2$  solder pad.  
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

