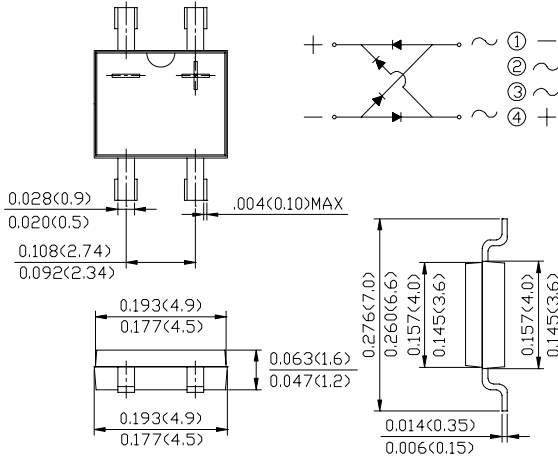




# LB05S THRU LB10S

## MINIATURE GLASS PASSIVATED SINGLE-PHASE SURFACE MOUNT BRIDGE RECTIFIER

### LBXS



Dimensions in inches and (millimeters)

**REVERSE VOLTAGE: 50 to 1000 VOLTS**  
**FORWARD CURRENT: 0.5 AMPERE**

### FEATURES

- Surge overload rating: 30 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Low leakage
- Reliable low cost construction utilizing molded

### MECHANICAL DATA

Case: Molded plastic, LBXS  
 Epoxy: UL 94V-O rate flame retardant  
 Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed  
 Mounting position: Any  
 Weight: 0.00528ounce, 0.134gram

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.

		LB05S	LB1S	LB2S	LB4S	LB6S	LB8S	LB10S	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current (see Fig. 1) on glass-epoxy P.C.B (Note 2) on aluminum substrate (Note 3)	$I_{(AV)}$				0.5				Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$				30				Amp
Maximum Forward Voltage at 4.0A DC and 25 °C	$V_F$				1.0				Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	$I_R$				5.0				uAmp
Typical Junction Capacitance (Note 1)	$C_J$				13				pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$				60				°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$				16				°C/W
Operating and Storage Temperature Range	$T_J, T_{stg}$				-55 to +150				°C

### NOTES:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads
- 3- On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

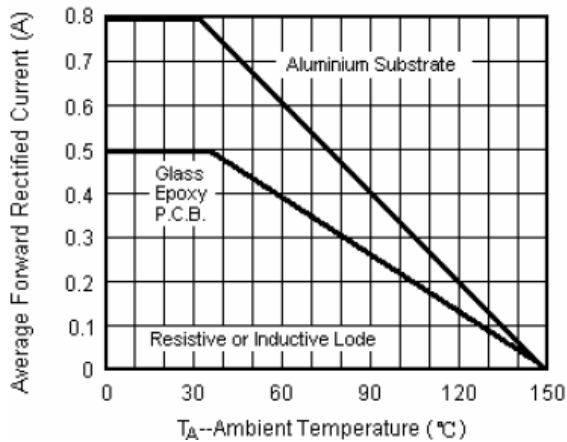


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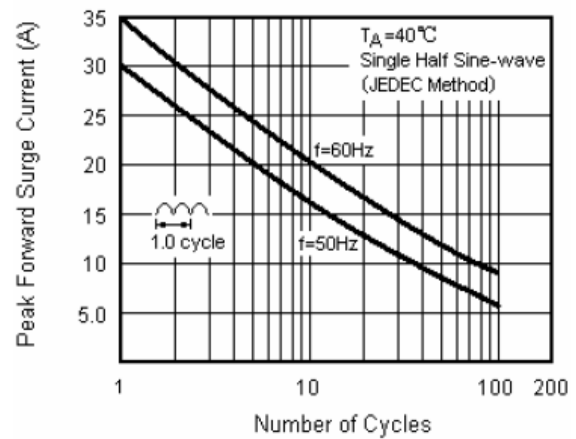
# MINIATURE GLASS PASSIVATED SINGLE-PHASE SURFACE MOUNT BRIDGE RECTIFIER

Characteristic Curves ( $T_A=25\text{ }^{\circ}\text{C}$  unless otherwise noted)

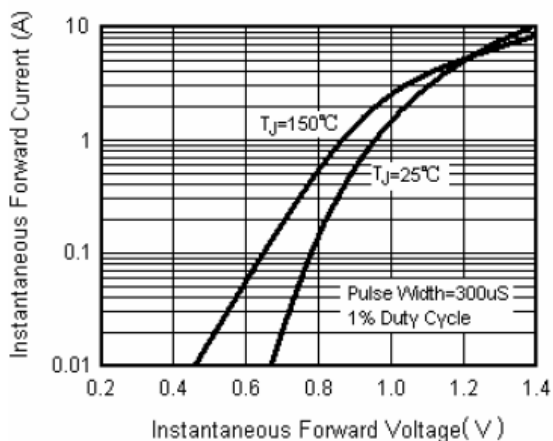
**Fig.1 Derating Curve For Output Rectified Current**



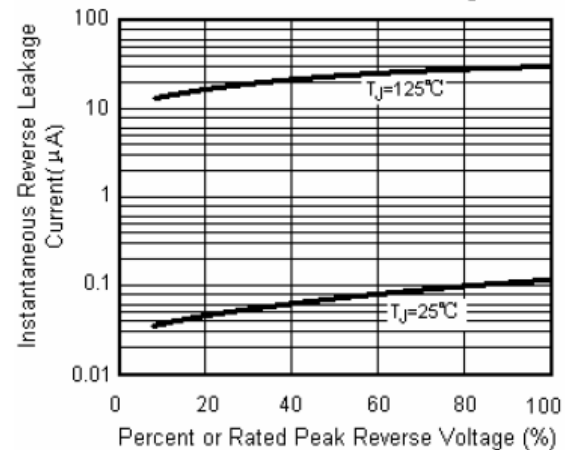
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg**



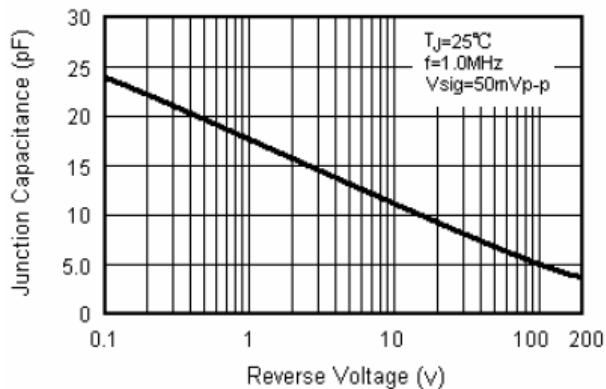
**Fig.3 Typical Forward Voltage Characteristics Per Leg**



**Fig.4 Typical Reverse Leakage Characteristics Per Leg**



**Fig.5 Typical Junction Capacitance Per Leg**



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



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