

Zibo Seno Electronic Engineering Co., Ltd.



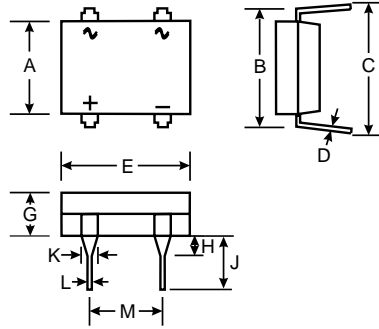
S1WB05 - S1WB100



1.0A 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-O



DIP		
Dim	Min	Max
A	6.20	6.50
B	6.80	8.40
C	7.24	8.70
D	0.20	0.38
E	8.12	8.80
G	2.15	3.40
H	1.30	-
J	3.80	4.90
K	0.90	1.40
L	0.45	0.58
M	5.00	5.20
All Dimensions in mm		

Mechanical Data

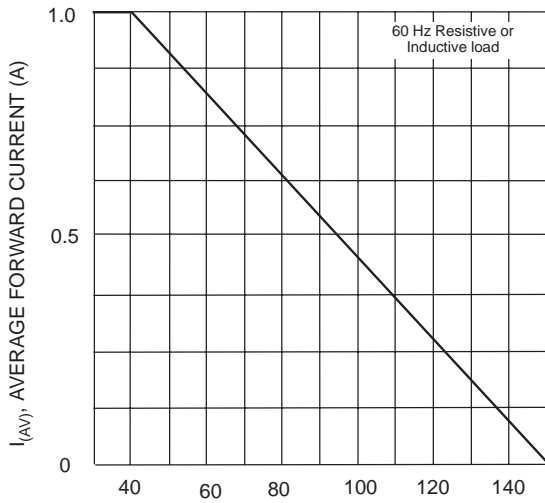
- Case: DIP, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.22 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version**

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

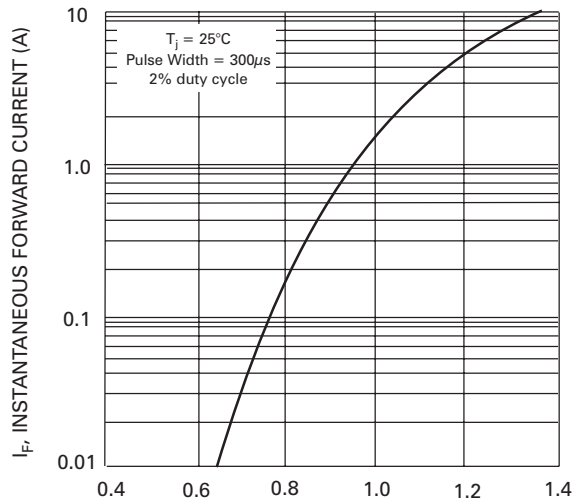
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	S1ZB 05	S1ZB 10	S1ZB 20	S1ZB 40	S1ZB 60	S1ZB 80	S1ZB 100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ $T_A = 40^\circ\text{C}$ Average Rectified Output Current (Note 2) @ $T_A = 40^\circ\text{C}$	I_o	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	5.0							A^2s
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}	2.0 500							μA
Typical Junction Capacitance per leg (Note 3)	C_j	13							pF
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	70 20							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150							$^\circ\text{C}$

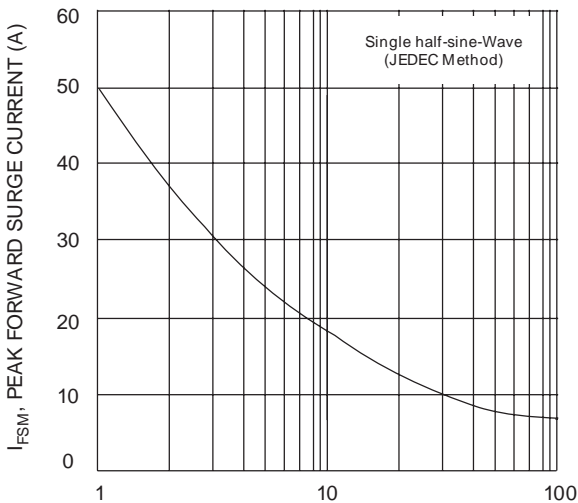
Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Mounted on aluminum substrate PC board with 1.3mm^2 solder pad.
3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



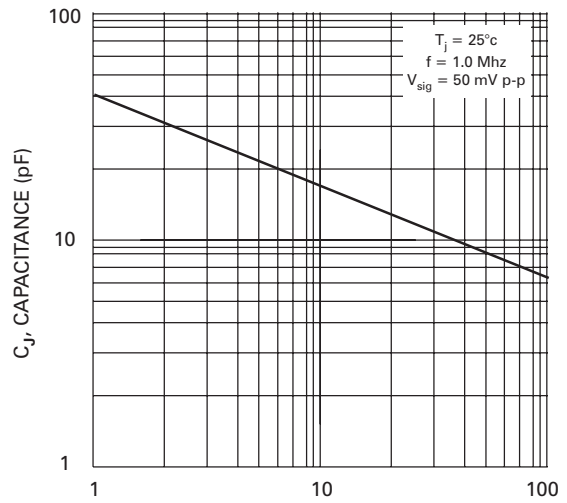
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typ Junction Capacitance (per element)

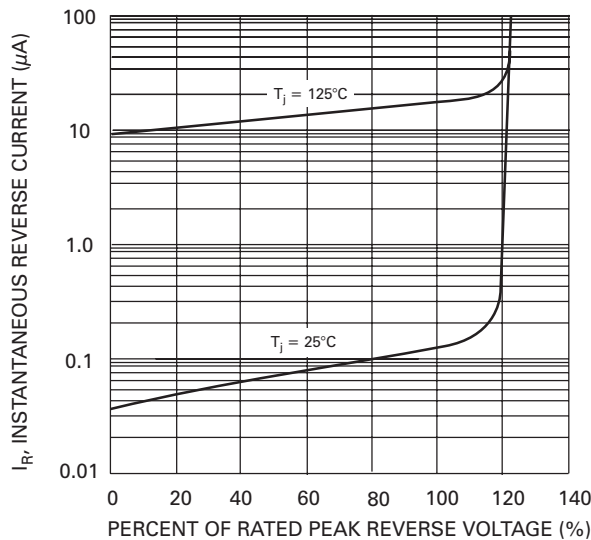


Fig. 5 Typ Reverse Characteristics (per element)