

# Zibo Seno Electronic Engineering Co., Ltd.



## D15SB05 - D15SB100



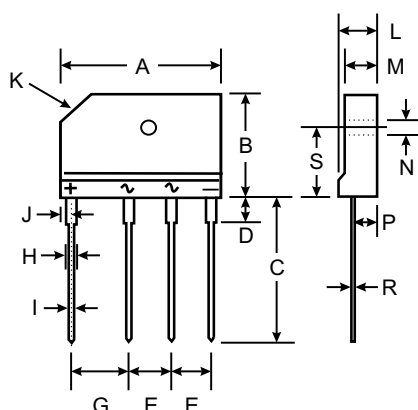
### 15A GLASS PASSIVATED BRIDGE RECTIFIER

#### Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500VRMS
- Low Reverse Leakage Current
- Surge Overload Rating to 240A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- Lead Free Finish/RoHS Compliant

#### Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Weight: 6.6 grams (approx)
- Marking: Type Number



D15-SB		
Dim	Min	Max
A	29.70	30.30
B	19.70	20.30
C	17.00	18.00
D	3.80	4.20
E	7.30	7.70
G	9.80	10.20
H	2.00	2.40
I	0.90	1.10
J	2.30	2.70
K	3.0 X 45°	
L	4.40	4.80
M	3.40	3.80
N	3.10	3.40
P	2.50	2.90
R	0.60	0.80
S	10.80	11.20
All Dimensions in mm		

#### Maximum Ratings and Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

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

Characteristic	Symbol	D15SB 05	D15SB 10	D15SB 20	D15SB 40	D15SB 60	D15SB 80	D15SB 100	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Forward Rectified Output Current @ T <sub>C</sub> = 100°C	I <sub>O</sub>				15				A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>				240				A
Forward Voltage (per element) @ I <sub>F</sub> = 7.5A DC	V <sub>FM</sub>				1.05				V
Peak Reverse Current @ T <sub>C</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>C</sub> = 125°C	I <sub>R</sub>				10 500				μA
I <sup>2</sup> t Rating for Fusing (t < 8.3ms) (Note 1)	I <sup>2</sup> t				240				A <sup>2</sup> s
Typical Junction Capacitance per Element (Note 2)	C <sub>j</sub>				60				pF
Typical Thermal Resistance, Junction to Case (Note 3)	R <sub>θJC</sub>				0.8				°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>				-65 to +150				°C

- Notes:
1. Non-repetitive, for t > 1ms and < 8.3 ms.
  2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
  3. Thermal resistance from junction to case per element. Unit mounted on 300 x 300 x 1.6mm copper plate heat sink.

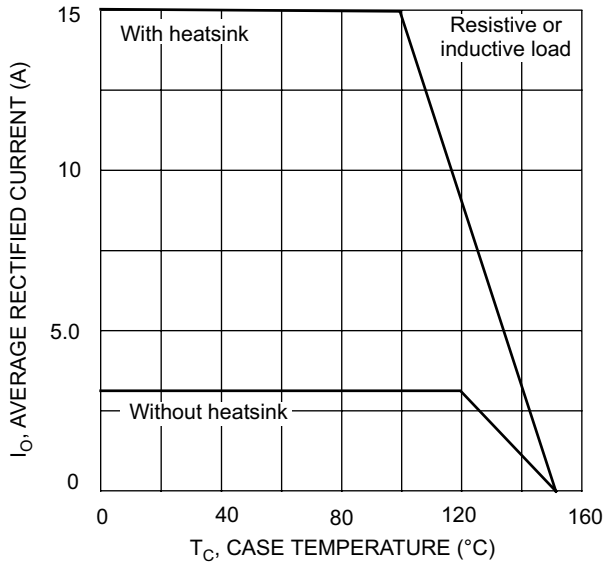


Fig. 1 Forward Current Derating Curve

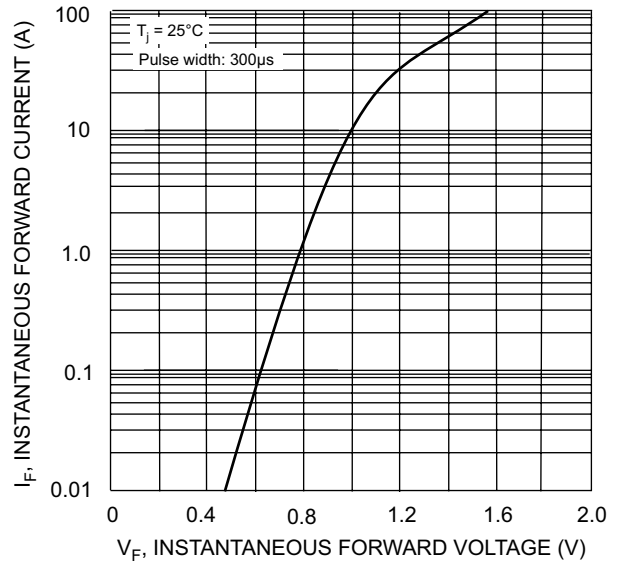


Fig. 2 Typical Forward Characteristics

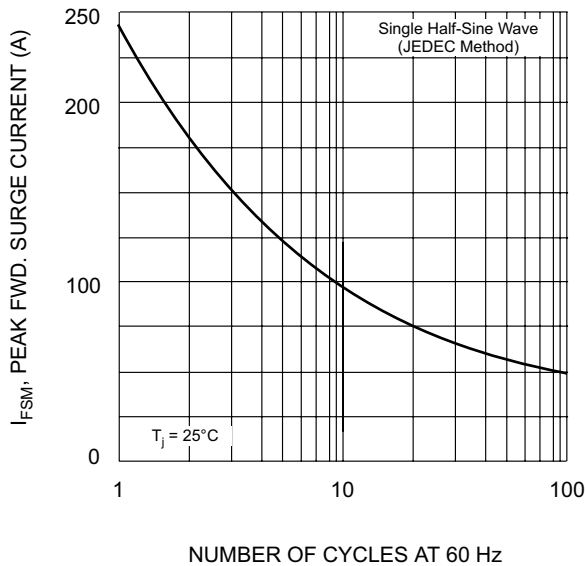


Fig. 3 Maximum Non-Repetitive Surge Current

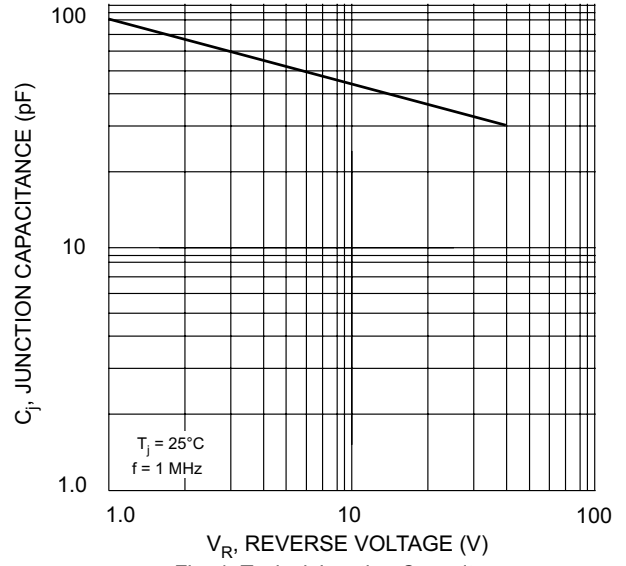


Fig. 4 Typical Junction Capacitance

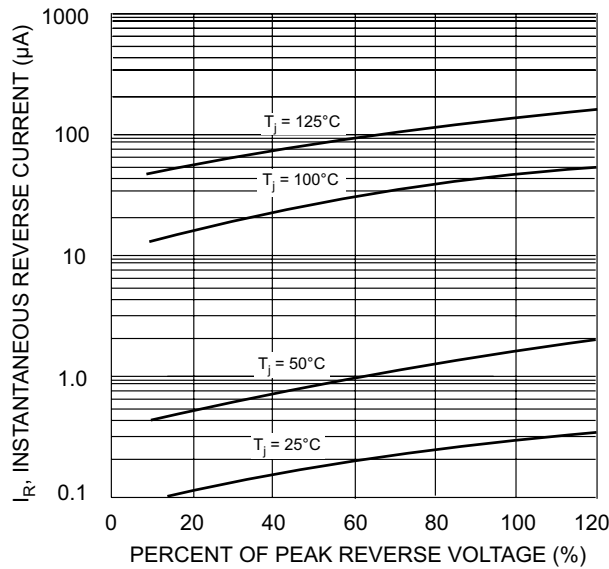


Fig. 5 Typical Reverse Characteristics