

Zibo Seno Electronic Engineering Co., Ltd.



RS10005M - RS1010M



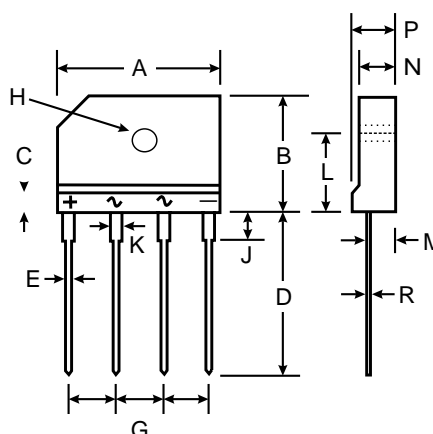
10A GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of 1500V_{RMS}
- Low Reverse Leakage Current
- Surge Overload Rating to 170A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- Lead Free: For RoHS / Lead Free Version

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



RS-10M		
Dim	Min	Max
A	24.80	25.20
B	14.70	15.30
C	4.00 Nominal	
D	17.20	17.80
E	0.90	1.10
G	7.30	7.70
H	3.10 \varnothing	3.40 \varnothing
J	3.30	3.70
K	1.50	1.90
L	9.30	9.70
M	2.50	2.90
N	3.40	3.80
P	4.40	4.80
R	0.60	0.80
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

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

Characteristic	Symbol	RS 10005M	RS 1001M	RS 1002M	RS 1004M	RS 1006M	RS 1008M	RS 1010M	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 Forward Rectified Output Current @ T _C = 110°C	I _O	10							A
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	170							A
Forward Voltage per element @ I _F = 5.0A	V _{FM}	1.05							V
Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ T _C = 125°C	I _R	2.0 500							μA
I ² t Rating for Fusing (t < 8.3ms) (Note 1)	I ² t	120							A ² s
Typical Junction Capacitance per Element (Note 2)	C _j	55							pF
Typical Thermal Resistance, Junction to Case (Note 3)	R _{θJC}	1.4							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150							°C

- Notes:
1. Non-repetitive, for t > 1.0ms and < 8.3ms.
 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 150 x 150 x 1.6mm copper plate heat sink.

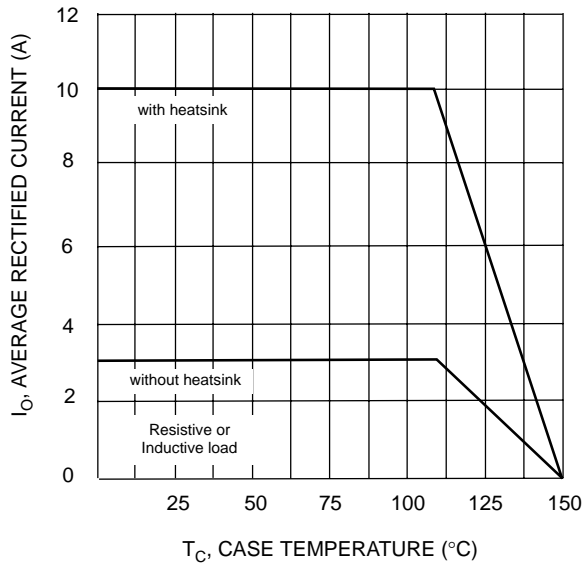


Fig. 1 Forward Current Derating Curve

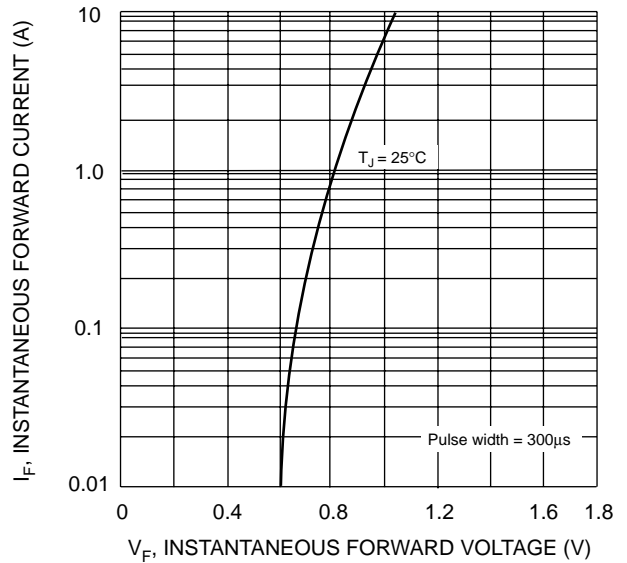


Fig. 2 Typical Forward Characteristics (per element)

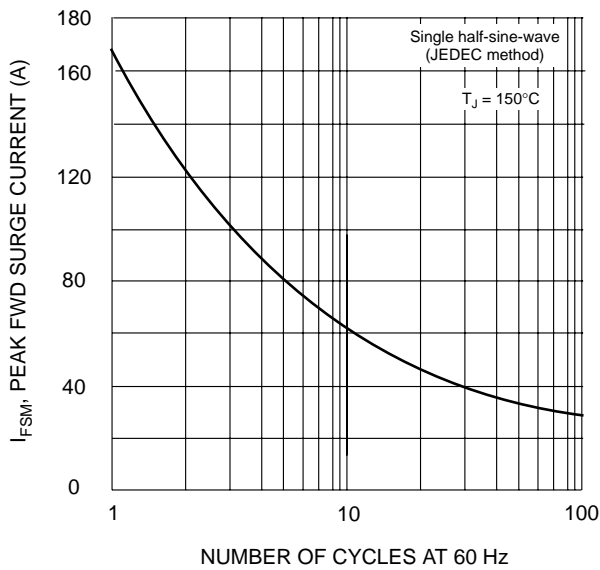


Fig. 3 Maximum Non-Repetitive Surge Current

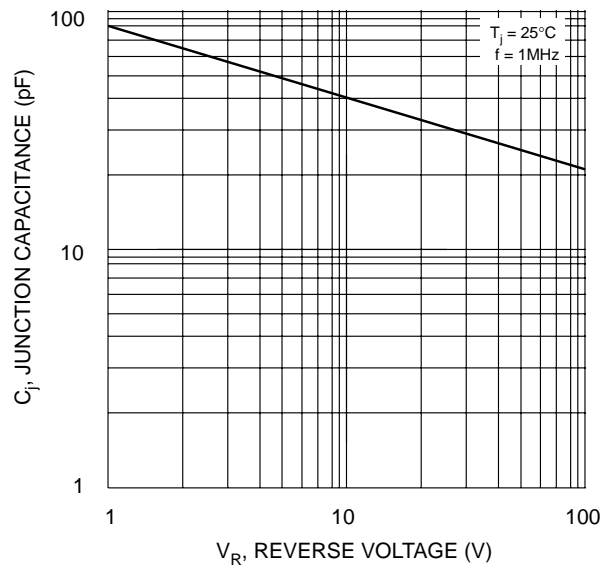


Fig. 4 Typical Junction Capacitance

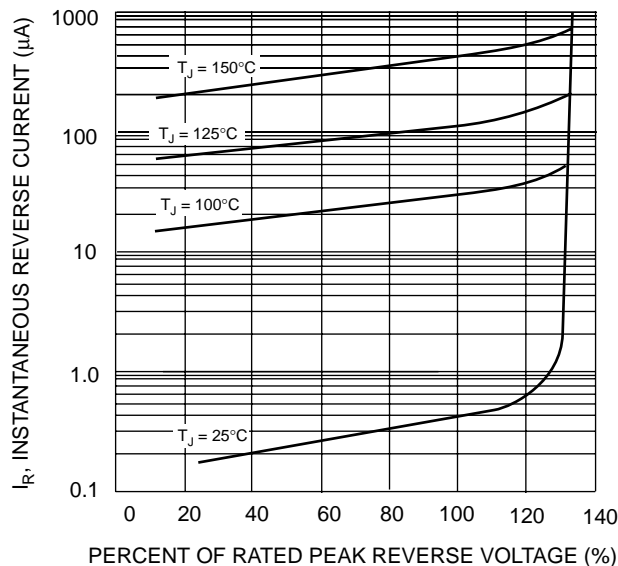


Fig. 5 Typical Reverse Characteristics