

Zibo Seno Electronic Engineering Co., Ltd.



RS6005M - RS610M

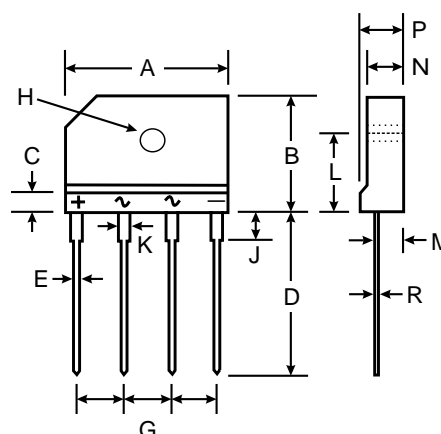
6.0A GLASS PASSIVATED BRIDGE RECTIFIER

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
- **Lead Free: For RoHS / Lead Free Version**



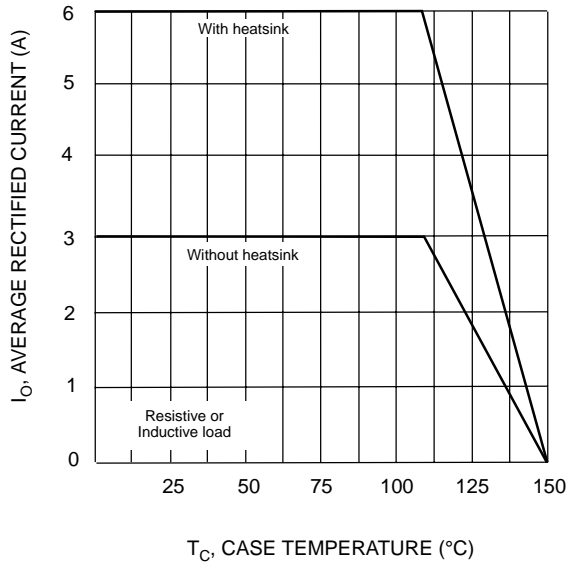
RS-6M		
Dim	Min	Max
A	24.80	25.20
B	14.70	15.30
C	4.00 Nominal	
D	17.20	17.80
E	0.90	1.10
G	7.30	7.70
H	3.10 \varnothing	3.40 \varnothing
J	3.30	3.70
K	1.50	1.90
L	9.30	9.70
M	2.50	2.90
N	3.40	3.80
P	4.40	4.80
R	0.60	0.80
All Dimensions in mm		

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

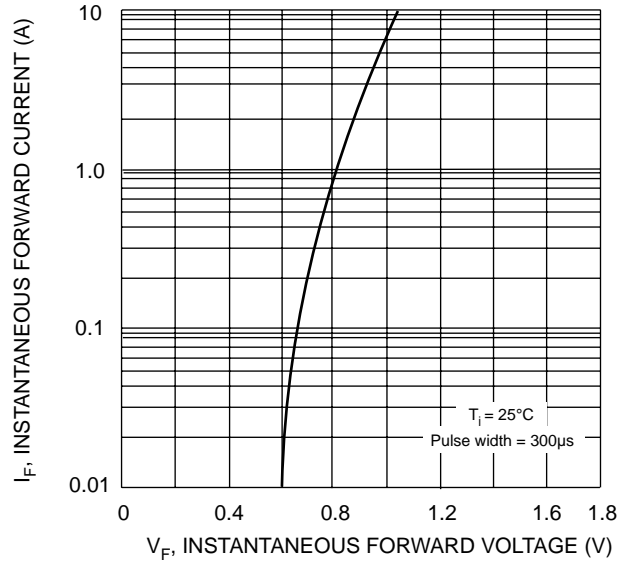
Single phase, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	RS 6005M	RS 601M	RS 602M	RS 604M	RS 606M	RS 608M	RS 610M	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 Forward Rectified Output Current @ T _C = 110°C	I _O	6.0							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 = 3.0A	V _{FM}	1.0							V
Peak Reverse Current @ T _C = 25°C at Rated DC Blocking Voltage @ T _C = 125°C	I _R	2.0 500							μ A
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}	1.8							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150							°C

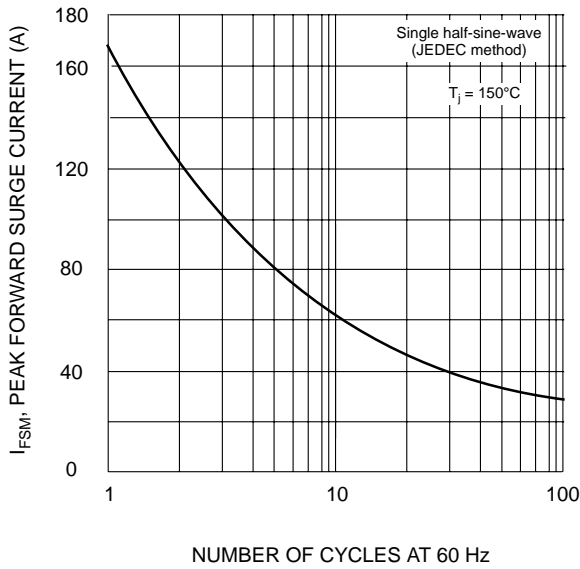
- Notes:
1. Non-repetitive, for t > 1ms and < 8.3 ms.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance from junction to case per element. Unit mounted on 75 x 75 x 1.6mm aluminum plate heat sink.



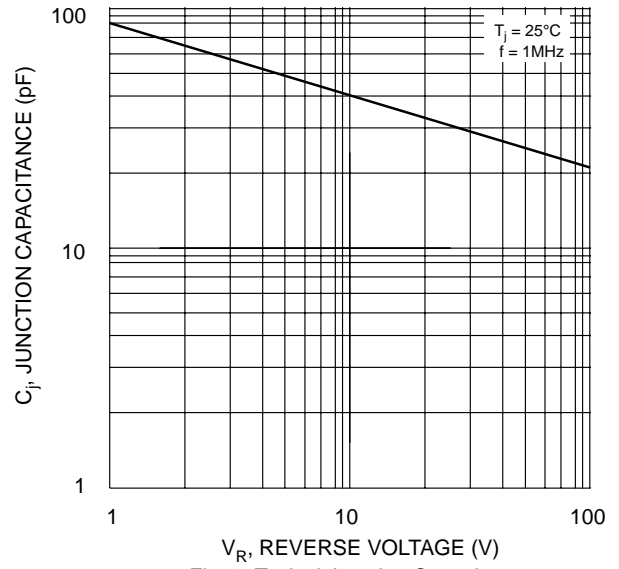
T_C , CASE TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



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



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Maximum Non-Repetitive Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Junction Capacitance

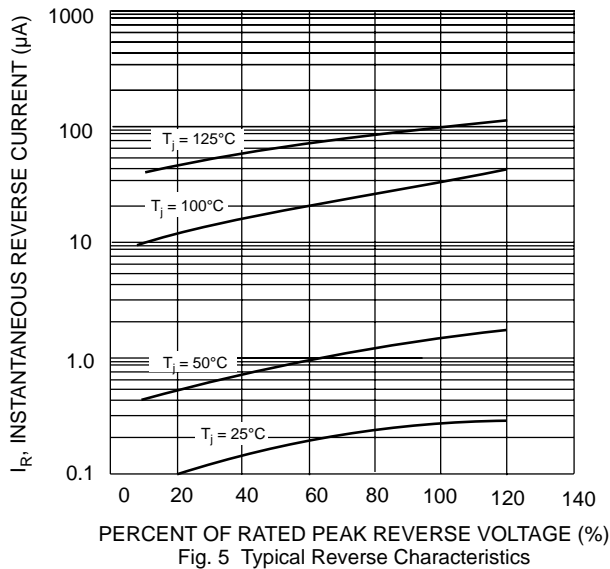


Fig. 5 Typical Reverse Characteristics