RS601 - RS607

6.0A BRIDGE RECTIFIER

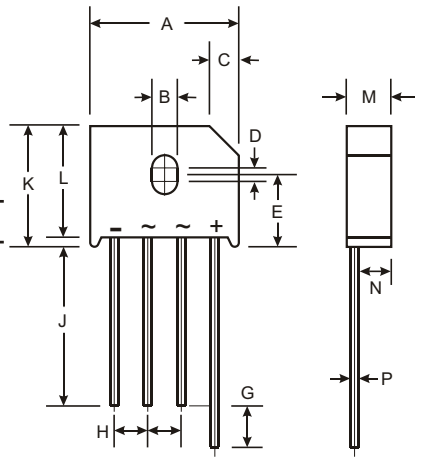
NOT RECOMMENDED FOR NEW DESIGNS, PLEASE USE GBU6005 - GBU610

Features

- UL Recognized, File #94661
- Ideal for Printed Circuit Board
- Surge Overload Rating of 250A Peak
- Low Forward Voltage Drop
- Easily Cleaned with Freon, Alcohol, Chlorothene and Similar Solvents
- The Plastic Material Carries UL Recognition 94V-0

Mechanical Data

- Case: RS-6, Molded Plastic
- Terminals: Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Body
- Approx. Weight: 8.0 grams
- Mounting Position: Any



RS-6		
Dim	**Min**	**Max**
A	22.7	23.7
B	3.6	4.1
C	4.2	4.7
D	1.7	2.2
E	10.3	11.3
G	4.5	6.8
H	4.6	5.6
J	25.4	-
K	-	19.3
L	16.8	17.8
M	6.6	7.1
N	4.7	5.2
P	1.2	1.3
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 601	RS 602	RS 603	RS 604	RS 605	RS 606	RS 607	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RSM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current @ T_C = 100°C @ T_A = 40°C	$I_{(AV)}$	6.0							A
Peak Forward Surge current, 8.3 ms half sine-wave superimposed on rated load	I_{FSM}	250							A
Maximum DC Forward Voltage Drop per element at 3.0A	V_F	1.0							V
Maximum DC Reverse Current at Rated @ T_A = 25°C DC Blocking Voltage, per element @ T_A = 100°C	I_R	10 1.0							μA mA
Maximum Thermal Resistance (Note 1)	$R_{\theta JC}$	4.7							°C/W
Operating Temperature Range	T_J	-55 to +125							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Notes: 1. Thermal Resistance junction to case per diode

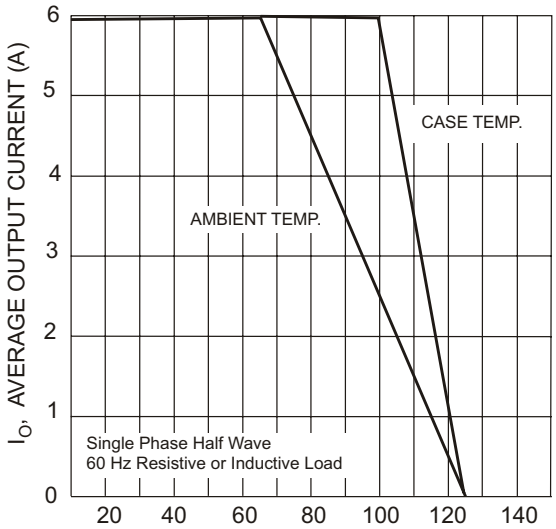


Fig. 1 Forward Current Derating Curve

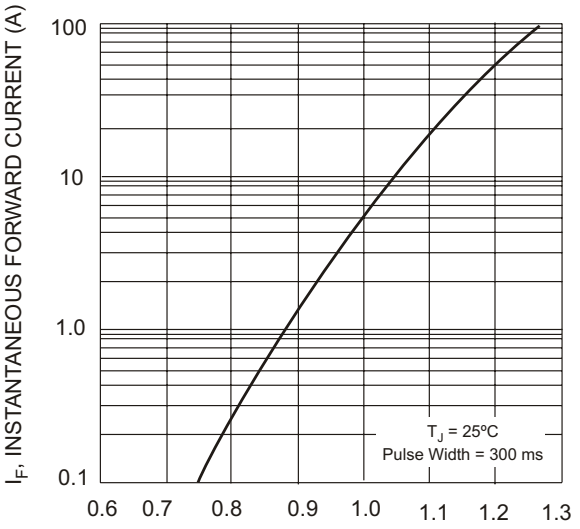


Fig. 2 Typical Forward Characteristics

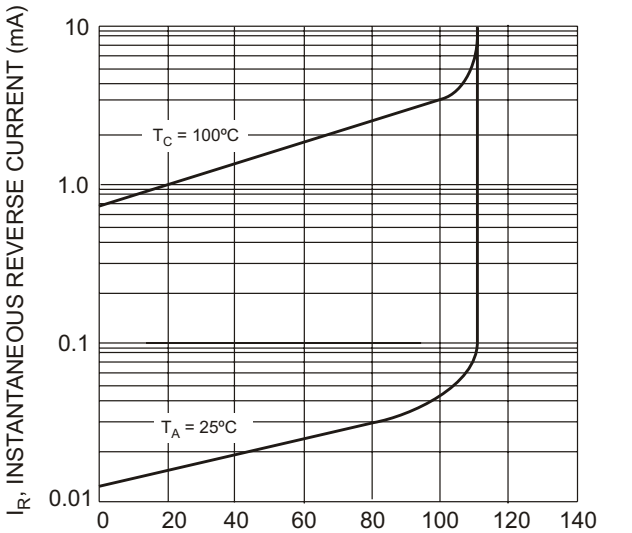


Fig. 3 Typical Reverse Characteristics

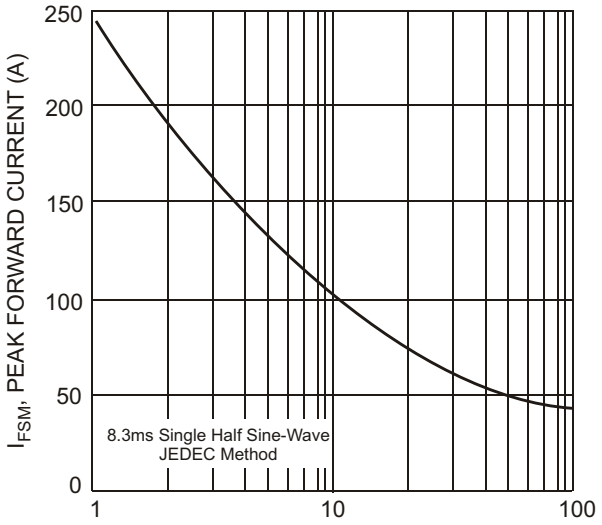


Fig. 4 Max Non-Repetitive Peak Forward Surge Current

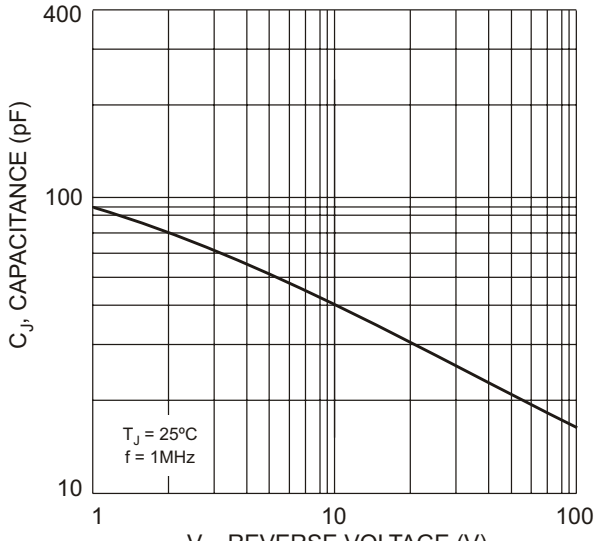


Fig. 5 Typical Junction Capacitance Per Element