



PBU601 - PBU607

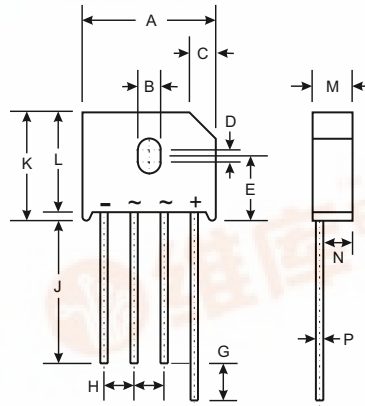
6.0A BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 250A Peak
- Ideal for Printed Circuit Board Applications
- Case to Terminal Isolation Voltage 1500V
- Plastic Material: UL Flammability Classification Rating 94V-0
- UL Listed Under Recognized Component Index, File Number E95060

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 Inch-pounds Maximum
- Weight: 8.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



PBU		
Dim	Min	Max
A	22.70	23.70
B	3.80	4.10
C	4.20	4.70
D	1.70	2.20
E	10.30	11.30
G	4.50	6.80
H	4.80	5.80
J	25.40	—
K	—	19.30
L	16.80	17.80
M	6.60	7.10
N	4.70	5.20
P	1.20	1.30
All Dimensions in mm		

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

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

Characteristic	Symbol	PBU 601	PBU 602	PBU 603	PBU 604	PBU 605	PBU 606	PBU 607	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 @ $T_C = 100^\circ\text{C}$	I_O	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	250							A
Forward Voltage (per element) @ $I_F = 3.0\text{A}$	V_{FM}	1.0							V
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_C = 100^\circ\text{C}$	I_R	10 1.0							μA mA
I^2t Rating for Fusing (Note 2)	I^2t	166							A^2s
Typical Thermal Resistance Junction to Case (Note 1)	$R_{\theta JC}$	4.2							K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$

Notes: 1. Thermal resistance junction to case mounted on heatsink.
2. Non-repetitive, for $t > 1.0\text{ms}$ and $t < 8.3\text{ms}$.



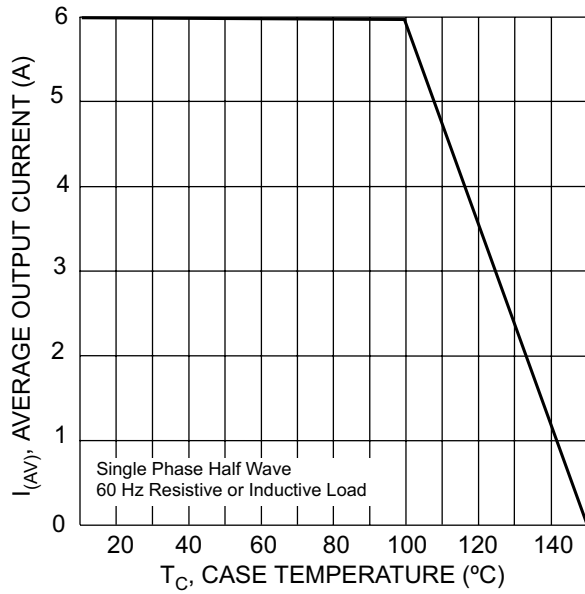


Fig. 1 Forward Current Derating Curve

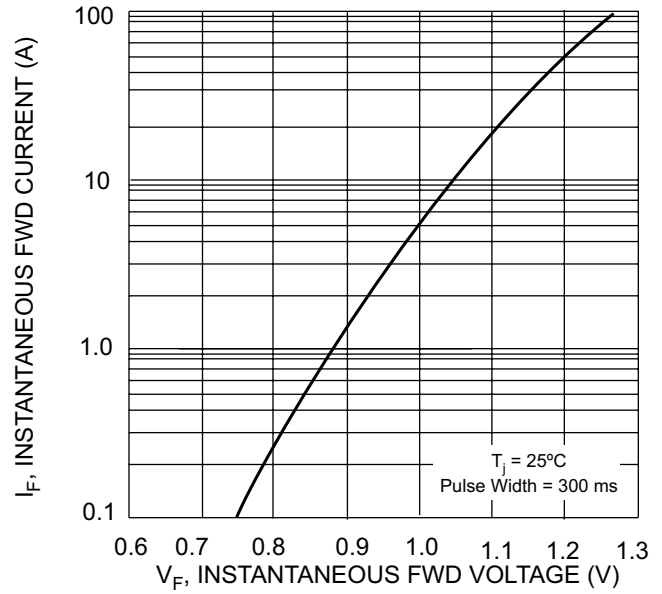


Fig. 2 Typical Forward Characteristics

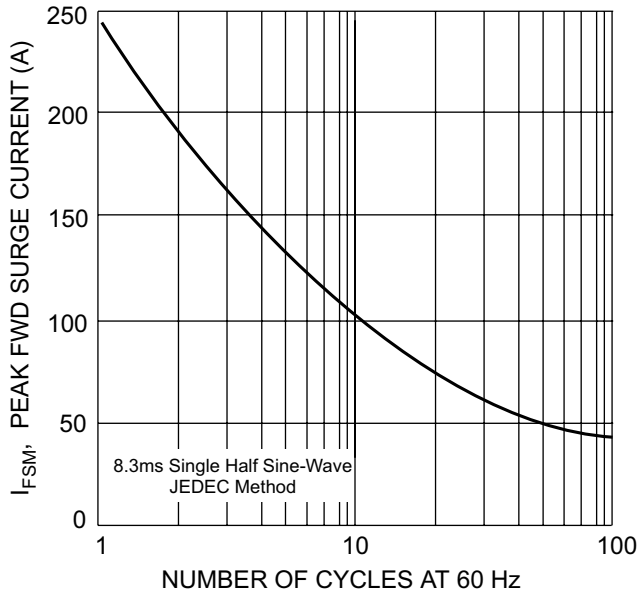


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

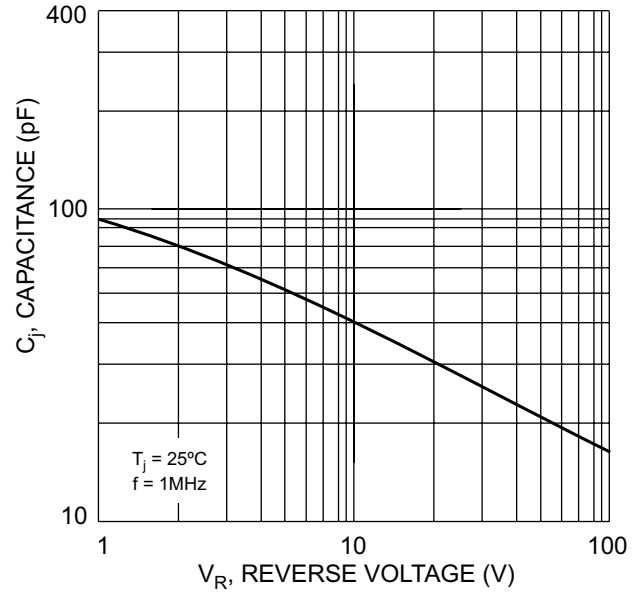


Fig. 4 Typical Junction Capacitance Per Element

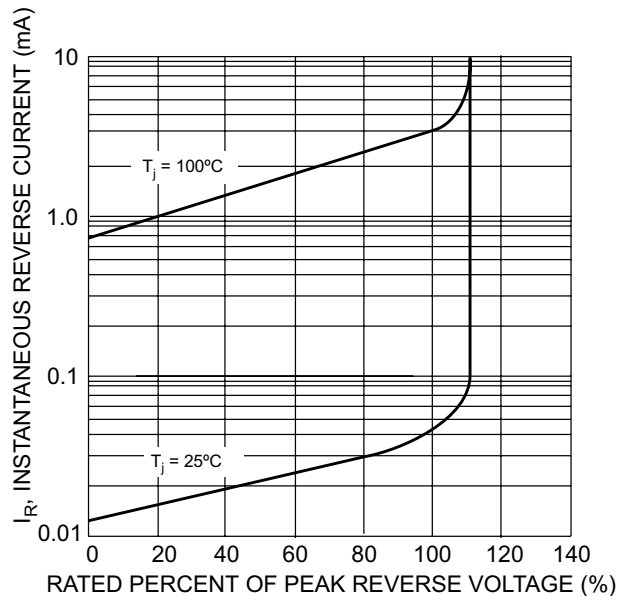


Fig. 5 Typical Reverse Characteristics