

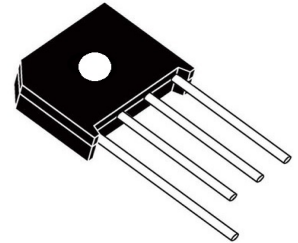
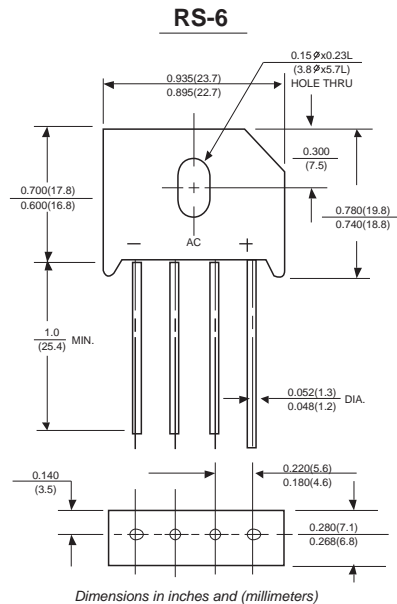
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 6.0 A**

### Features

- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension
- The plastic package carries Underwriters Laboratory
- Flammability Classification 94V-0

### Mechanical Data

- Case: Molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on case
- Weight: 0.3 ounce, 8.0 grams



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

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

Characteristic	Symbol	RS601	RS602	RS603	RS604	RS605	RS606	RS607	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	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 output rectified current at $T_A=100^\circ\text{C}$ (Note 2) $T_A=40^\circ\text{C}$ (Note 3)	$I_{AV}$	6.0						A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150.0						A	
Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	93						$\text{A}^2\text{s}$	
Maximum instantaneous forward voltage drop per bridge element at 6.0A	$V_F$	1.0						Volts	
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	$I_R$	10						uA	
Typical Junction Capacitance (Note 1)	$C_J$	105						pF	
Typical Thermal Resistance	$R_{\theta JA}$	4.7						$^\circ\text{C}/\text{W}$	
Operating junction temperature range	$T_J$	-65 to +150						$^\circ\text{C}$	
storage temperature range	$T_{STG}$	-65 to +150						$^\circ\text{C}$	

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 2.6" x 1.4" x 0.06" thick (6.3x3.5x0.15cm) Al. plate.
3. Unit mounted on P.C. board with 0.5" x 0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length.



**RATINGS AND CHARACTERISTIC CURVES RS601 THRU RS607**

