

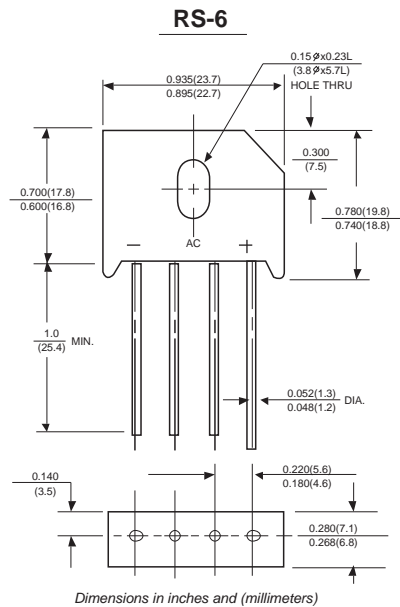
VOLTAGE RANGE: 50 - 1000V
CURRENT: 6.0 A

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) and $T_A=40^\circ\text{C}$ (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_t^2	93							A^2s
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 $T_A=25^\circ\text{C}$ and $T_A=100^\circ\text{C}$	I_R	10							μA
		1.0							mA
Typical Junction Capacitance (Note 1)	C_J	105							pF
Typical Thermal Resistance	R_{qJA}	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

