

VOLTAGE RANGE: 50 - 1000V

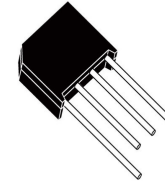
CURRENT: 4.0 A

Features

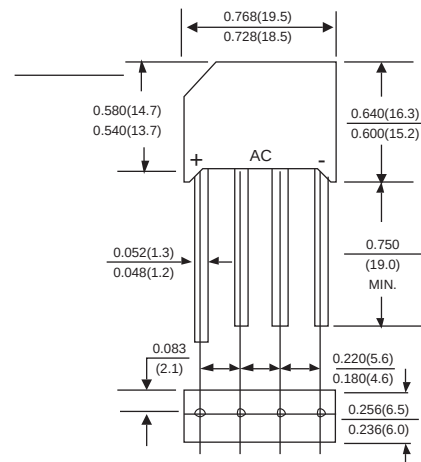
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375(9.5mm) lead length,
5 lbs. (2.3kg) tension
- The plastic package carries Underwriters Laboratory
Flammability Classification 94V-0

Mechanical Data

- I Case: Molded plastic body
- I Terminals: Plated leads solderable per
MIL-STD-750, Method 2026
- I Polarity: Polarity symbols marked on case
- I Mounting Position: Any
- I Weight: 0.22 ounce, 6.21 grams



RS-4



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	RS401	RS402	RS403	RS404	RS405	RS406	RS407	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 $T_c=50^\circ\text{C}$ (Note 2) $T_A=50^\circ\text{C}$ (Note 3)	$I_{(AV)}$	4.0 3.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Rating for Fusing($t < 8.3\text{ms}$)	I^2t	93							A^2s
Maximum instantaneous forward voltage drop per bridge element at 4.0A	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							μA
		1.0							mA
Typical Junction Capacitance (Note 1)	C_J	55							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20							$^\circ\text{C/W}$
Operating junction temperature range	T_J	-65 to +150							$^\circ\text{C}$
storage temperature range	T_{STG}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0" x 3.0" x 0.11" thick (7.5x7.5x0.3cm) Al. plate.
3. P.C. Board mounted with 0.5" x 0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length.



FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

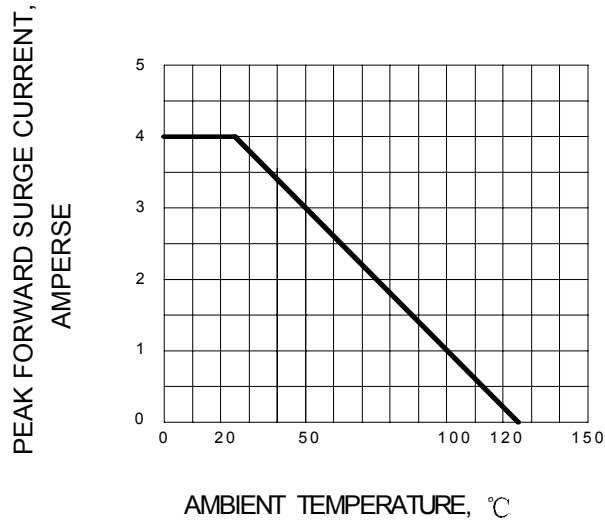


FIG.2 -- MAXIMUM FORWARD SURGE CURRENT

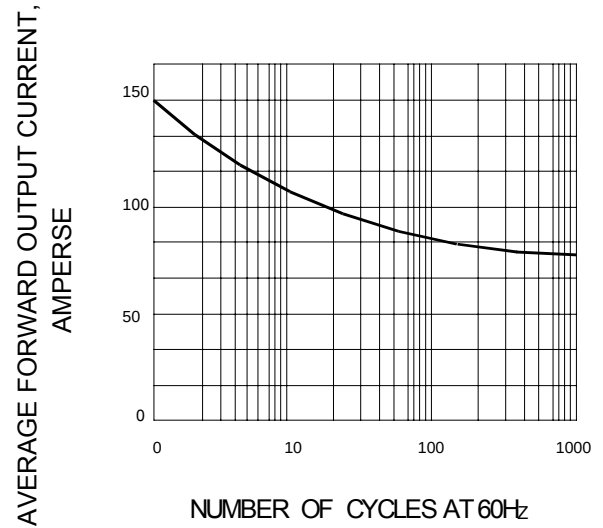


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

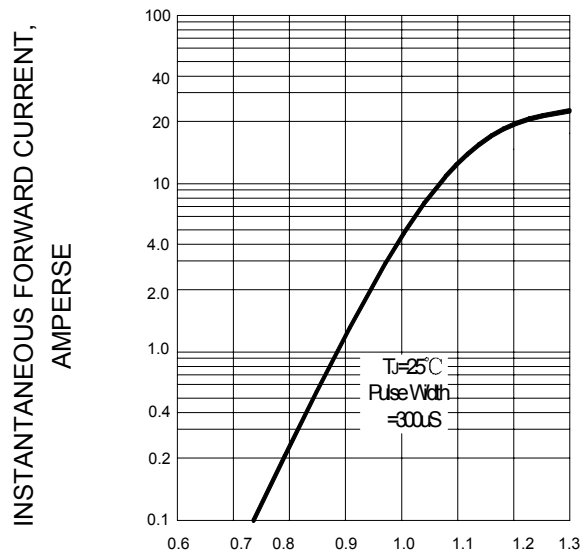
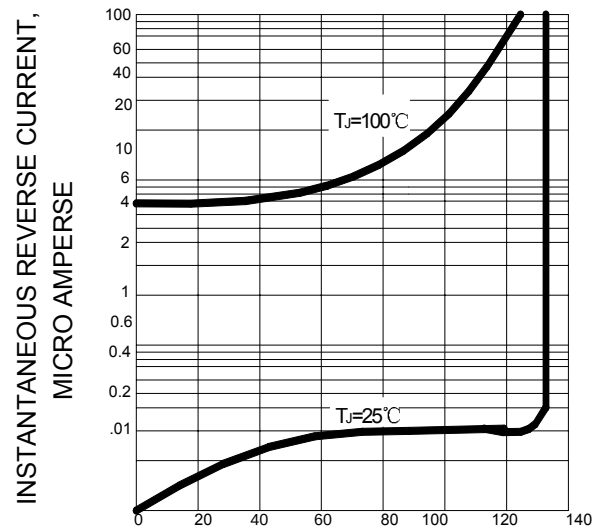


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

PERCENT OF RATED PEAK REVERSE VOLTAGE