

RBS2~RBS10

Single Phase 1.0Amp Fast Recovery Bridge Rectifiers

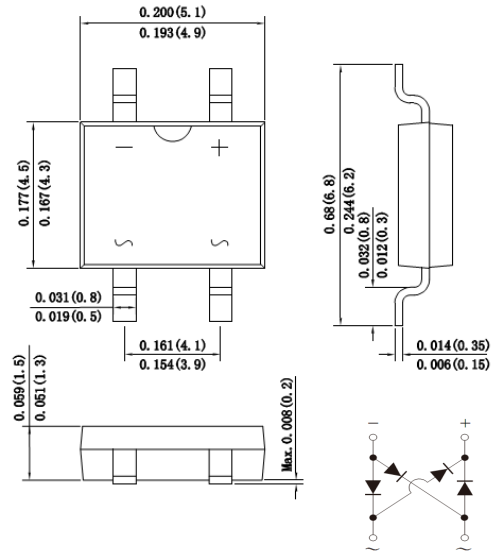
ABS

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass passivated Junction chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

- Case** : Molded plastic body
- Terminals** : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity** : Polarity symbol marking on body
- Mounting Position** : Any
- Weight** : 0.0034 ounce, 0.098 grams



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	RBS2	RBS4	RBS6	RBS8	RBS10	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^\circ\text{C}$ On glass-epoxy P.C.B (Note 1)	$I_{(AV)}$	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0					A
Rating for fusing ($t=8.3\text{ms}$, $T_a=25^\circ\text{C}$)	I_t^2	3.73					A^2s
Maximum instantaneous forward voltage at 1.0A	V_F	1.30					V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	I_R	5.0 500					μA
Maximum reverse recovery time (Note 2)	T_{rr}	150	250	500			ns
Typical junction capacitance (Note 3)	C_J	10.0					pF
Typical thermal resistance	R_{qJA}	85.0					$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150					$^\circ\text{C}$

- Note:**
1. Mounted on glass epoxy PC board with 1.3*1.3mm solder pad
 2. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$
 3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

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Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

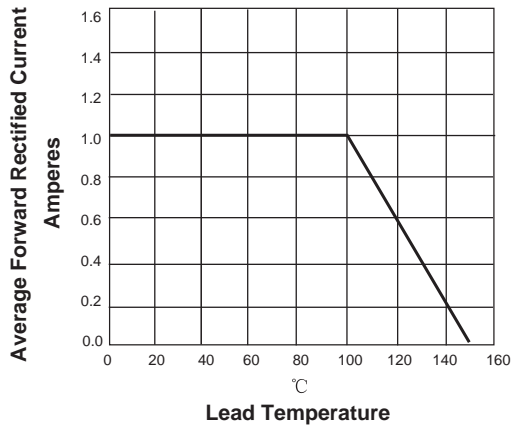


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

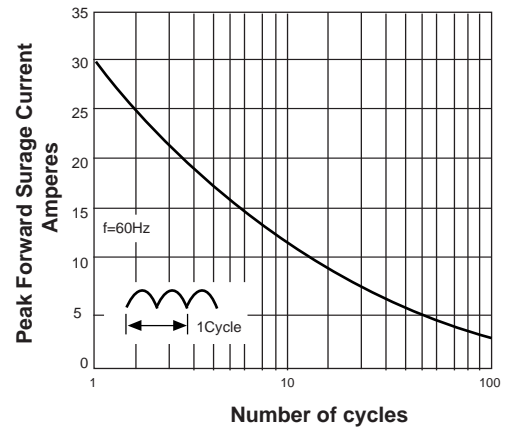


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

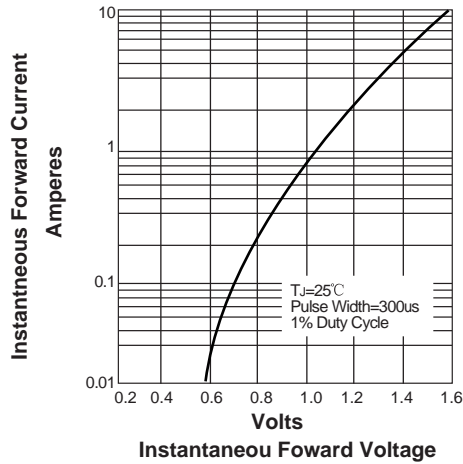


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

