

VI. Bridge Rectifier

ABS32~ABS310 Single Phase 3.0 Amp Schottky Barrier Bridge Rectifiers

Features

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

Mechanical Data

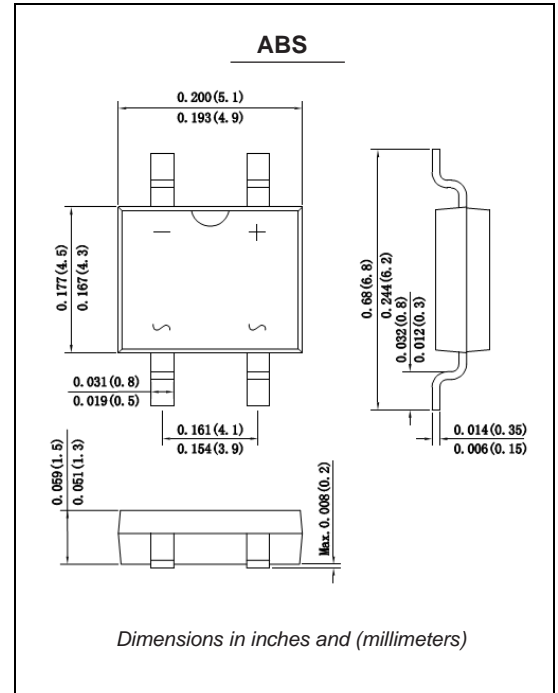
Case: Molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Polarity symbol marking on body

Mounting Position: Any

Weight : 0.004 ounce, 0.1 grams



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%.

	SYMBOLS	ABS32	ABS34	ABS36	ABS38	ABS310	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	28	42	56	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	40	60	80	100	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	3.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80.0					Amps
Maximum instantaneous forward voltage at 3A	V_F	0.55		0.70		0.85	Volts
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 125^\circ C$	I_R	0.5 20					mA
Typical thermal resistance (Note 1)	R_{qJA}	45					°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +155					°C

Note:1. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2x0.2"(5.0x5.0mm) copper pad areas

Ratings And Characteristic Curves

ABS32 THRU ABS310

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

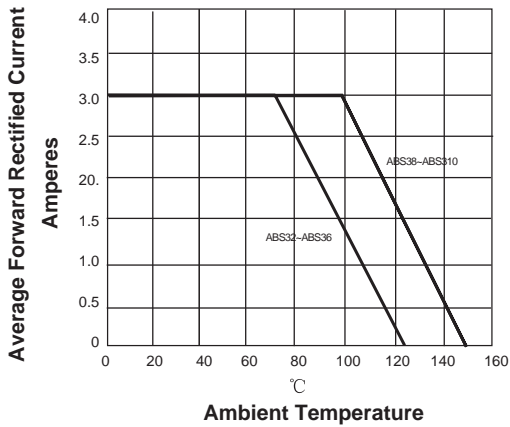


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

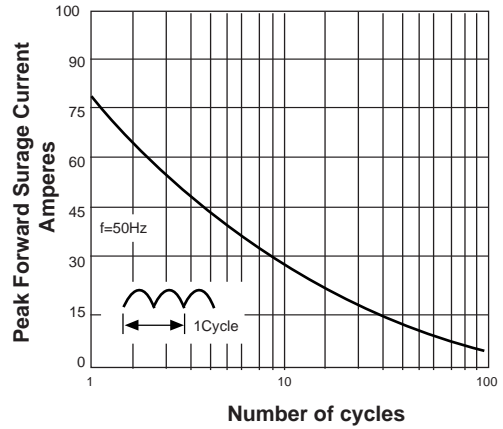


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

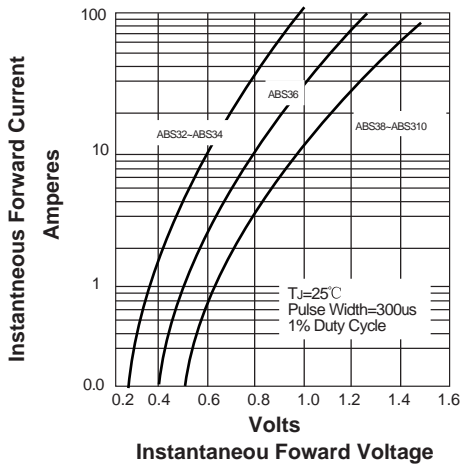


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

