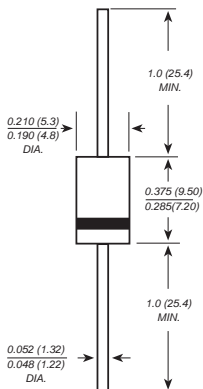


SB520 THRU SB5B0

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 5.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.04 ounce, 1.10 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	SB 520	SB 530	SB 540	SB 550	SB 560	SB 570	SB 580	SB 590	SB 5B0	UNITS		
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	70	80	90	100	VOLTS		
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	49	56	63	70	VOLTS		
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	70	80	90	100	VOLTS		
Maximum average forward rectified current 0.375" (9.5mm) lead length (see fig. 1)	$I_{(AV)}$	5.0									Amps		
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0									Amps		
Maximum instantaneous forward voltage at 5.0A	V_F	0.55		0.70		0.85					Volts		
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	50.0			25.0							mA	
Typical junction capacitance (NOTE 1)	C_J	500			400							pF	
Typical thermal resistance (NOTE 2)	R_{qJA}	25.0									°C/W		
Operating junction temperature range	T_J	-65 to +125			-65 to +150								°C
Storage temperature range	T_{STG}	-65 to +150											°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES SB520 THRU SB5B0

