

Schottky Diode

SB550

50V / 5A

DATASHEET

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OEM – General Semiconductor

Source: General Semiconductor Databook 1998

SB520 THRU SB560

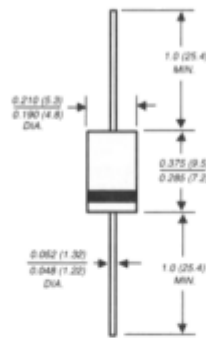
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 60 Volts Forward Current - 5.0 Amperes

FEATURES

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ High current capability, low forward voltage drop
- ◆ High surge capability
- ◆ Guardring for overvoltage protection
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3 kg) tension

DO-201AD



Dimensions in inches and (millimeters)

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, 1.12 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	SB520	SB530	SB540	SB550	SB560	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	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) at rated T _L	I _{FSM}	150.0					Amps
Maximum instantaneous forward voltage at 5.0A (NOTE 1)	V _F	0.55		0.67		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	I _R	0.5					mA
T _A =25°C		50.0		25.0			
T _A =100°C							
Typical thermal resistance (NOTE 2)	R _{θJA} R _{θJL}	25.0 8.0					°C/W
Operating junction temperature range	T _J	-65 to +125			-65 to +150		°C
Storage temperature range	T _{STG}	-65 to +150					°C

NOTES:

- (1) Pulse test: 300µs pulse width, 1% duty cycle
- (2) Thermal resistance junction to lead vertical P.C.B. mounted, 0.375" (9.5mm) lead length

RATINGS AND CHARACTERISTIC CURVES SB520 THRU SB560

