

# Schottky Diode

## **SB520**

20V / 5A

# DATASHEET

from

[www.web-bcs.com](http://www.web-bcs.com)

OEM – General Semiconductor

Source: General Semiconductor Databook 1998

# SB520 THRU SB560

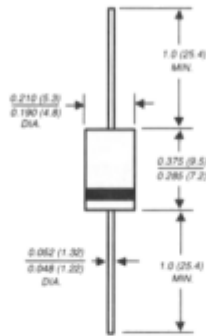
## SCHOTTKY BARRIER RECTIFIER

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 <sub>RRM</sub>	20	30	40	50	60	Volts
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	Volts
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG. 1)	I <sub>(AV)</sub>	5.0					Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at rated T <sub>L</sub>	I <sub>FSM</sub>	150.0					Amps
Maximum instantaneous forward voltage at 5.0A (NOTE 1)	V <sub>F</sub>	0.55		0.67		Volts	
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 1)	I <sub>R</sub>	0.5					mA
T <sub>A</sub> =25°C T <sub>A</sub> =100°C		50.0		25.0			
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub> R <sub>θJL</sub>	25.0 8.0					°C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +125			-65 to +150		°C
Storage temperature range	T <sub>STG</sub>	-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

