

87 DE 3890137 0002217 7

SB520 THRU SB560

HIGH CURRENT SCHOTTKY BARRIER RECTIFIERS

**GENERAL
INSTRUMENT**



FEATURES

- Low cost
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low V_f
- High surge capacity
- Epitaxial construction
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- High temperature soldering guaranteed: 250°C/10 seconds/.375" (9.5mm) lead lengths at 5 lbs., (2.3kg) tension

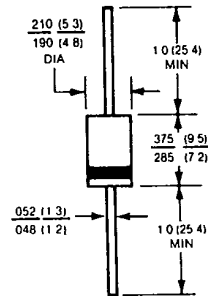
MECHANICAL DATA

Case: DO-201AD Molded Plastic
 Terminals: Axial leads, solderable per MIL-STD-202 Method 208
 Polarity: color band denotes cathode
 Mounting Position: Any
 Weight: 0.04 ounces, 1.12 grams

VOLTAGE RANGE
20 to 60 Volts

CURRENT
5.0 Amperes

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Resistive or inductive load
 For capacitive load, derate current by 20%.

	SB520	SB530	SB540	SB550	SB560	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	V_{RRM}
Maximum RMS Voltage	14	21	28	35	42	V_{RMS}
Maximum DC Blocking Voltage	20	30	40	50	60	V_{DC}
Maximum Average Forward Rectified Current, .375", 9.5mm, Lead Length See Fig. 1	5.0					$A_{(AV)}$
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	250					A_{pk}
Maximum Instantaneous Forward Voltage at 5.0A	.55		.67			V_{pk}
Maximum DC Reverse Current at DC Blocking Voltage $T_A = 25^\circ C$ $T_A = 100^\circ C$	0.5 50.0					mA mA
Maximum Thermal Resistance $R_{\theta JL}$ (Note 1)	15			10		$^\circ C/W$
Typical Junction Capacitance (Note 2)	500			380		pF
Operating Temperature Range T_J	-65 to +125			-65 to +150		$^\circ C$
Storage Temperature Range T_{STG}	-65 to +150					$^\circ C$

NOTES:
 1. Thermal Resistance Junction to Lead Vertical PC Board Mounting .375" (9.5mm) Lead Lengths
 2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

**RATING AND CHARACTERISTIC CURVES
SB520 THRU SB560**

