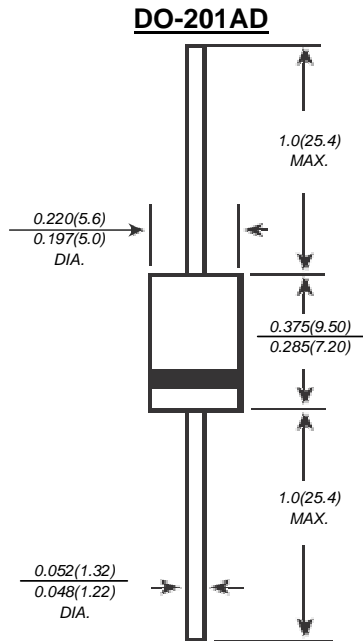




SB540L THRU SB5100L

Low-VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage -40 to 100 Volts Forward Current - 5.0 Ampere



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: JEDECDO-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: 1.12 gram

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%.

PARAMETER	SYMBOLS	SB540L	SB545L	SB560L	SB5100L	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	100	Volts
Maximum RMS voltage	V _{RMS}	28	31.5	42	70	Volts
Minimum DC Breakdown Voltage	V _{DC}	40	45	60	100	Volts
Average Rectified current (see FIG-3.)	I _{F(AV)}	5.0				Amp
Non-repetitive Peak Forward Surge Current (note 1.)	I _{FSM}	150				Amps
Maximum Forward Voltage at 5.0A	V _F	0.49			0.7	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage T _J =25°C T _J =100°C	I _R	0.5 50				mA
Typical Thermal Resistance (NOTE 2)	R _{θJL}	10			45	°C/W
Operating Junction Temperature Range	T _J	-55 ~ +150				°C
Storage Temperature Range	T _{STG}	-55 ~ +150				°C

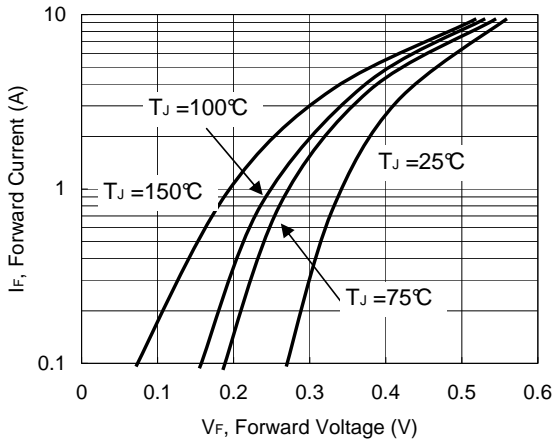
- Note:**
1. 8.3ms single half sine-wave superimposed on rated load(JEDEC method)
 2. Thermal Resistance Junction to Lead Vertical PC Board Mounting .375" (9.5mm) Lead Lengths.
 3. T_J=25°C unless otherwise specified.



SB540L THRU SB5100L

RATINGS AND CHARACTERISTIC CURVES

**FIG. 1- Typical Forward Characteristics
40V~60V**



**FIG. 2- Typical Forward Characteristics
100V**

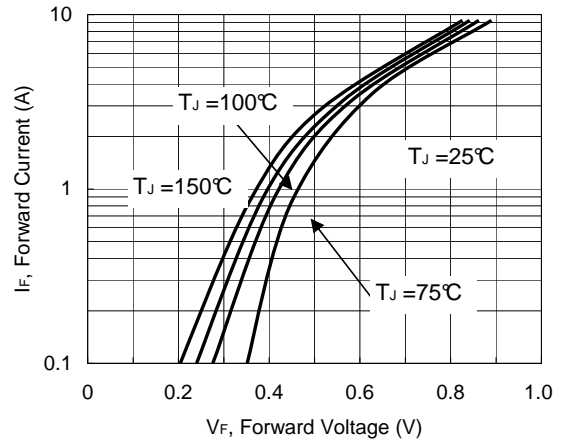


FIG. 3-Typical Reverse Characteristics

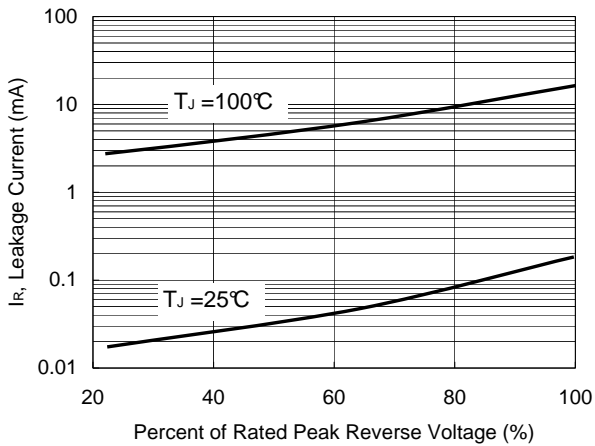


FIG. 4-Forward Current Derating Curve

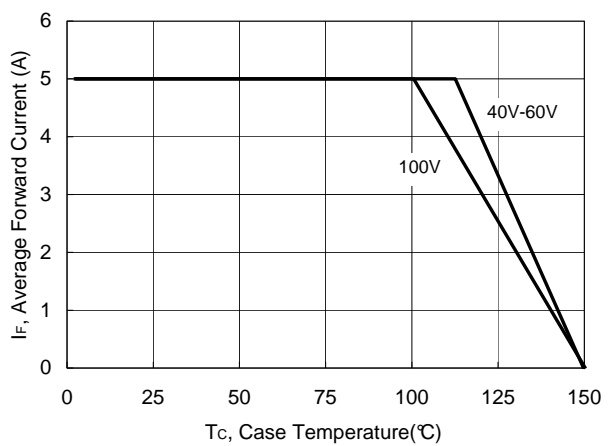


FIG. 5-Typical Junction Capacitance under Bias

