GOOD-ARK

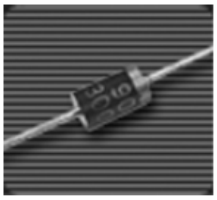
# SB5B5 & SB5C0

Schottky Barrier Rectifiers

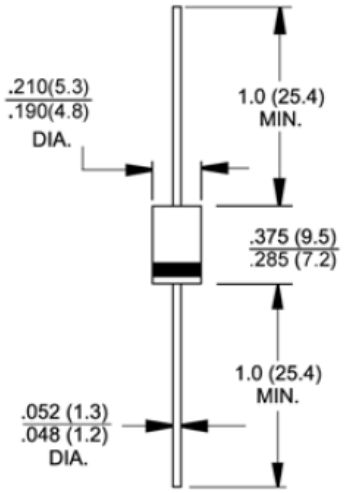
Reverse Voltage 150to 200 Volts  Forward Current 5.0 Amperes

## Features

- Plastic Package Has Underwriters Laboratory Flammability Classification 94V-0
- Low power loss , high efficiency
- For use in low voltage , high frequency inverters , free wheeling , and polarity protection applications
- Guardring  for overvoltage protection



**DO-201AD**




**Dimensions in inches and (millimeters)**

## Mechanical Data

- Case : JEDEC DO-20AD molded plastic bobky
- Terminals: Plated axial leads , solderable per MIL-STD-750,Method 2026
  High temperature soldering guaramteed:
  250℃/10 seconds 0.375”(9.5mm) Lead Length,
  5lbs (2.3kg) tension
- Polarity : Color band denotes cathode end
- Weight : 0.014 ounce , 1.15 gram
- Mounting position : Any

## Maximum Ratings and Electrical Characteristics

(TA= 25℃ unless otherwise noted)

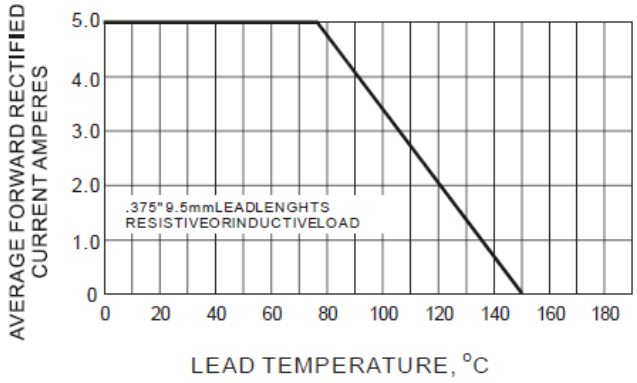
| Parameter | Symbol | SB 5B5 | SB5C0 | Units |
|---|---|---|---|---|
| Maximum repetitive peak reverse voltage | $V_{RRM}$ | 150 | 200 | Volts |
| Maximum RMS voltage | $V_{RMS}$ | 105 | 140 | Volts |
| Maximum DC blocking voltage | $V_{DC}$ | 150 | 200 | Volts |
| Maximum average forward rectified current<br>0.375”(9.5mm) lead length at $T_L$=100℃ | $IF_{(AV)}$ | 5.0 | | Amps |
| Peak forward surge current<br>8.3ms single half sine-wave superimposed onrates load | $I_{FSM}$ | 150 | | Amps |
| Maximum DC reverse current @$T_j$=25℃<br>at rated DC blocking voltage @$T_j$=100℃ | $I_R$ | 0.01<br>5 | | mA |
| Maximum forward voltage at 5.0A DC | $V_F$ | 0.90 | | Volts |
| Typical thermal resistance(Note 2) | $R_{\theta JL}$ | 16 | | ℃/W |
| Operating junction temperature range | $T_j$ | -55 to +150 | | ℃ |
| storage temperature range | $T_{STG}$ | -55 to +150 | | ℃ |

Notes：1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

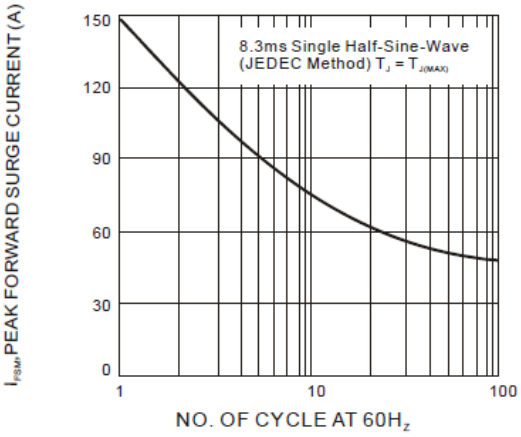
2. Thermal Resistance Junction to Lead.

## RATINGS AND CHARACTERISTIC CURVES

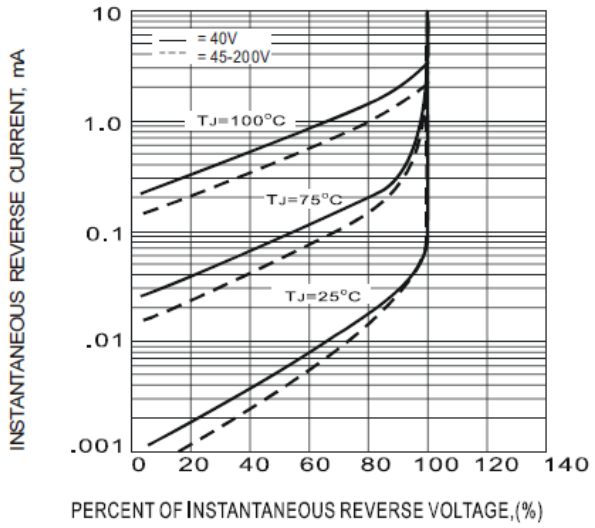
F1G.1 – FORWARD CURRENT DERATING CURVE



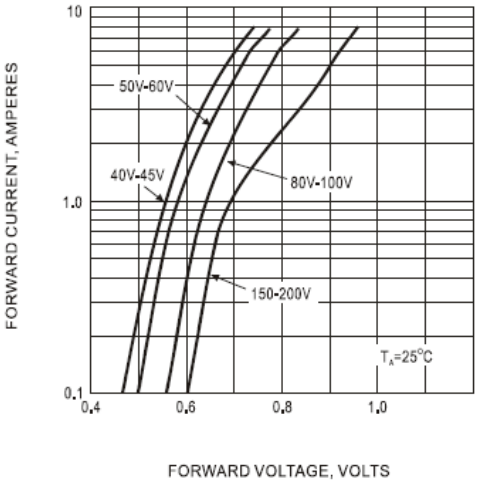

F1G. 2 –MAXIMUM NON-REPETITIVE SURGE CURRENT




F1G.3 – TYPCAL TEVERSE CHARACTERISTIC




F1G.4 – TYPLCAL INSTANTANEOUS FORWARD CHARACTERISTIC




F1G.5 – TYPLCAL TOTAL CAPACITANCE