

## SB320 THRU SB3100 3.0AMP. Schottky Barrier Rectifier

VOLTAGE:20 TO 100V

CURRENT:3.0A



### Specification Features:

- Case: Epoxy, Molded
- Weight:1.2Gram (Approximately)
- High current capability,Low Forward Voltage Drop
- High surge current capability
- Finish: All External Surfaces Corrosion Resistant And Terminal Leads Are Readily Solderable
- Lead And Mounting Surface Temperature For Soldering Purposed:  
260°C Max. For 10 Seconds 1/16 Inch From Case
- RoHS Compliant
- Cathode Indicated By Polarity Band

DEVICE MARKING DIAGRAM



SB3XX : Device Name SB320- SB3100  
KEL : KEL Logo

### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise noted

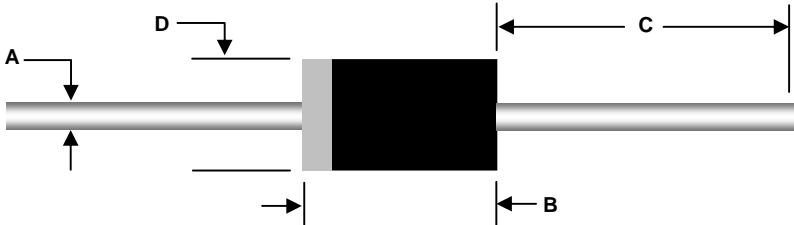
| Parameter  | Symbol          | SB 320      | SB 330 | SB 340 | SB 350 | SB 360 | SB 380      | SB 3100 | Units              |
|--|-----------------|-------------|--------|--------|--------|--------|-------------|---------|--------------------|
| Maximum Repetitive Peak Reverse Voltage  | $V_{RRM}$       | 20          | 30     | 40     | 50     | 60     | 80          | 100     | V                  |
| Maximum DC Blocking Voltage  | $V_R$           | 20          | 30     | 40     | 50     | 60     | 80          | 100     | V                  |
| Maximum Average Forward Rectifier Current.<br>(0.375" Lead Length @ $T_A=75^\circ\text{C}$ ) | $I_{F(AV)}$     | 3.0         |        |        |        |        |             |         | A                  |
| Non-repetitive Peak Forward Surge Current.<br>(8.3mS Single Half Sine-wave)                  | $I_{FSM}$       | 80          |        |        |        |        |             |         | A                  |
| Operating Junction Temperature   | $T_J$           | 100         |        |        |        |        | 150         |         | $^\circ\text{C}$   |
| Storage Temperature Range  | $T_{STG}$       | -55 to +100 |        |        |        |        | -55 to +150 |         | $^\circ\text{C}$   |
| Thermal Resistance (Note 1)<br>(Junction to Ambient)   | $R_{\theta JA}$ | 30          |        |        |        |        |             |         | $^\circ\text{C/W}$ |

### Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

| Parameter   | Symbol | SB 320 | SB 330 | SB 340 | SB 350 | SB 360 | SB 380 | SB 3100 | Units |    |
|---|--------|--------|--------|--------|--------|--------|--------|---------|-------|----|
| Maximum D.C Reverse Current<br>At Rated D.C Blocking Voltage<br>@ $T_A=25^\circ\text{C}$<br>@ $T_A=100^\circ\text{C}$ | $I_R$  | 1.0    |        |        |        | 30.0   |        |         |       | mA |
| Forward Voltage @3A   | $V_F$  | 0.550  |        |        | 0.750  |        | 0.850  |         | V     |    |
| Total Capacitance<br>@VR=4V, f=1MHz   | $C_T$  | 180    |        |        |        |        |        |         | pF    |    |

**NOTE:** (1) Thermal resistance from junction to ambient at 0.375" lead length, vertical P.C. board mounted

## Package Outline

| Package    | Case Outline   |      |               |       |
|------------|--|------|---------------|-------|
|            |  |      |               |       |
| DO-201AD   | <b>DO-201AD</b>  |      |               |       |
| <b>DIM</b> | <b>Millimeters</b>   |      | <b>Inches</b> |       |
|            | Min  | Max  | Min           | Max   |
| <b>A</b>   | 1.18   | 1.30 | 0.046         | 0.052 |
| <b>B</b>   | 7.20   | 9.60 | 0.285         | 0.375 |
| <b>C</b>   | 25.40  | ---  | 1.000         | ---   |
| <b>D</b>   | 4.80   | 5.30 | 0.190         | 0.210 |



## NOTICE

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