

**5A/100V Low VF Trench Schottky Rectifier****FEATURES**

- ✧ High current capability, low forward voltage
- ✧ Excellent high temperature stability
- ✧ Low power loss, and high efficiency
- ✧ High forward surge capability
- ✧ RoHS compliant
- ✧ Trench MOS Schottky technology

MACHANICAL DATA

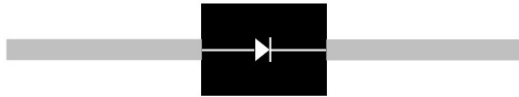
- ✧ Case: DO-201AD(DO-27) plastic package
- ✧ Terminal: Matte tin plated, solderable per MIL-STD-750, Method 2026
- ✧ Molding Compound Flammability Rating:UL94-0
- ✧ High temperature soldering guaranteed: 260°C/10second
- ✧ Packed with FRP substrate and epoxy underfilled

ORDERING INFORMATION

- ✧ Device: SB5100TSL
- ✧ Package: DO-201AD(DO-27)
- ✧ Marking: SB5100TSL
- ✧ Material: RoHS compliant
- ✧ Packing: Tape & Ammo
- ✧ Quantity per box: 1,250pcs

APPLICATIONS

- ✧ Switching mode power supply applications
- ✧ Portable equipment battery applications
- ✧ High frequency rectification
- ✧ DC/DC converter

PIN CONFIGURATION**PACKAGE OUTLINE****ABSOLUTE MAXIMUM RATING (Tamb=25°C, unless otherwise specified)**

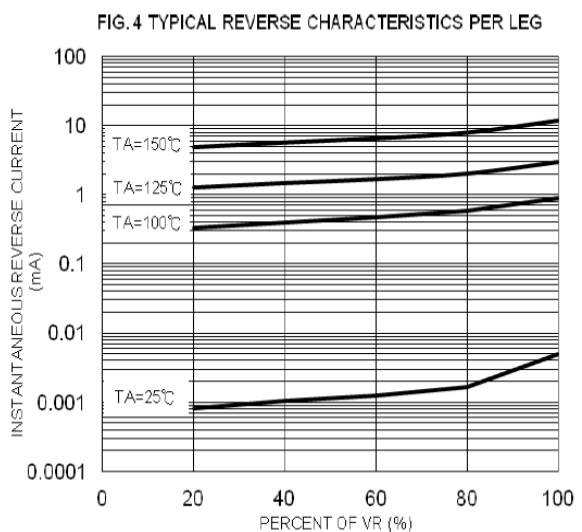
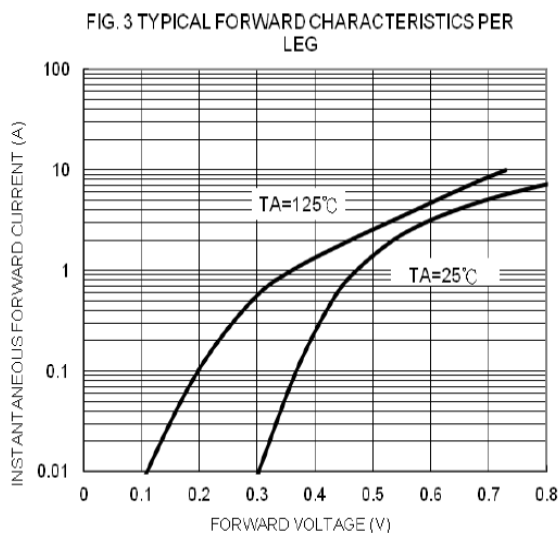
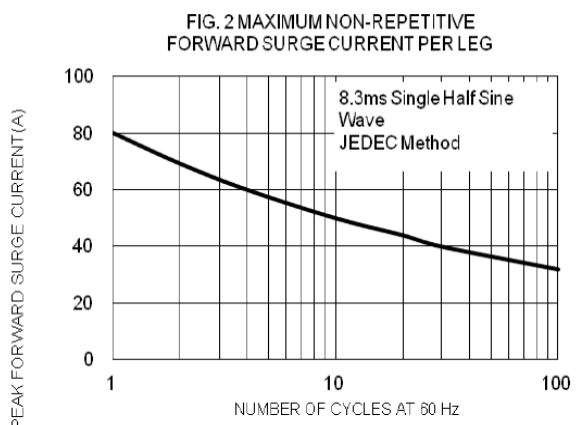
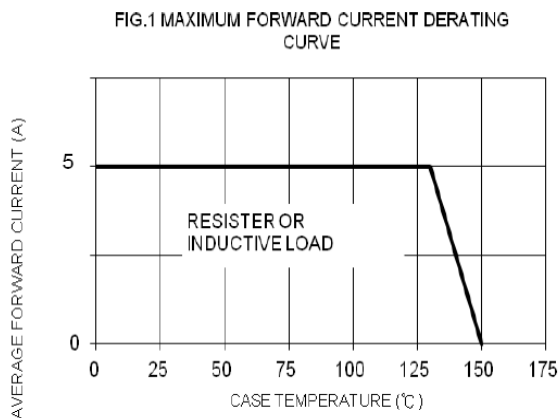
| Symbol | Parameter | Value | Units |
|-------------------|---|----------|-------|
| V_{RRM} | Repetitive Peak Reverse Voltage | 100 | V |
| $I_{F(AV)}$ | Average Forward Current | 5 | A |
| I_{FSM} | Peak Forward Surge Current, 8.3ms single half sine-wave | 80 | A |
| T_J & T_{STG} | Junction and Storage Temperature | -40~+150 | °C |

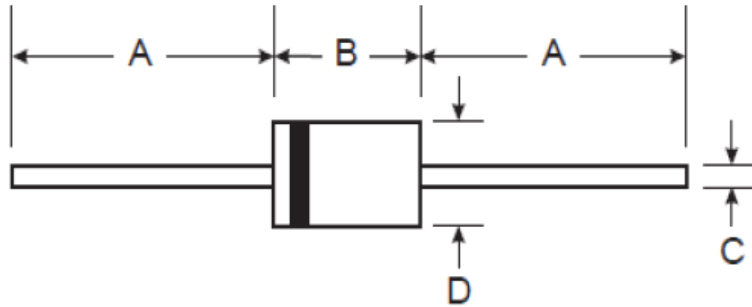


ELECTRICAL CHARACTERISTICS (Tamb=25°C, unless otherwise specified)

| Symbol | Parameter | Test Condition | Min | Typ | Max | Units |
|----------------|---------------------------|--------------------------------|-----|------|------|-------|
| V _F | Forward Voltage | I _F = 3A Ta=25°C | | 0.59 | | V |
| | | I _F = 3A Ta=125°C | | 0.53 | | V |
| | | I _F = 5A Ta=25°C | | 0.65 | 0.75 | V |
| | | I _F = 5A Ta=125°C | | 0.61 | 0.70 | V |
| V _R | Reverse Breakdown Voltage | I _R = 0.5mA | 100 | | | V |
| I _R | Reverse Leakage Current | V _R = 100V Ta=25°C | | | 50 | μA |
| | | V _R = 100V Ta=125°C | | | 10 | mA |

ELECTRICAL CHARACTERISTICS CURVE



**DO-201AD(DO-27) PACKAGE OUTLINE DIMENSIONS**

| DO-201AD(DO-27) Plastic | | | | |
|-------------------------|-------|------|-------|-----|
| Dim | Min | | Max | |
| | Inch | mm | Inch | mm |
| A | 1.0 | 25.4 | - | - |
| B | 0.285 | 7.2 | 0.375 | 9.5 |
| C | 0.039 | 1.0 | 0.052 | 1.3 |
| D | 0.190 | 4.8 | 0.210 | 5.3 |