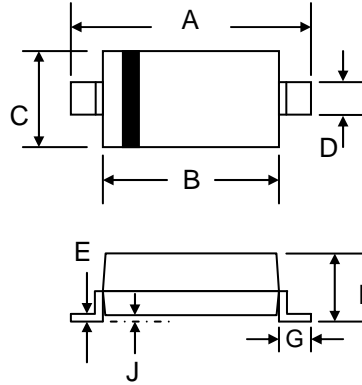


Features

- **Very Low Forward Voltage**
- Fast Switching Speed
- PN Junction Guard Ring for Transient and ESD Protection
- For General Purpose Switching Applications
- Plastic Material – UL Recognition Flammability Classification 94V-0



| SOD-323 | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 2.30 | 2.75 |
| B | 1.60 | 1.80 |
| C | 1.15 | 1.35 |
| D | 0.25 | 0.40 |
| E | 0.09 | 0.18 |
| G | 0.20 | 0.40 |
| H | 0.80 | 1.15 |
| J | — | 0.12 |
| All Dimensions in mm | | |

Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)
- Marking: W5
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**

Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|--|---------------------------------|-------------|------------------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RRM} V_{RWM} V_R | 10 | V |
| Forward Continuous Current | I_F | 3.0 | A |
| Non-Repetitive Peak Forward Surge Current @ $t < 10\text{ms}$ | I_{FSM} | 5.0 | A |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | $^\circ\text{C}$ |

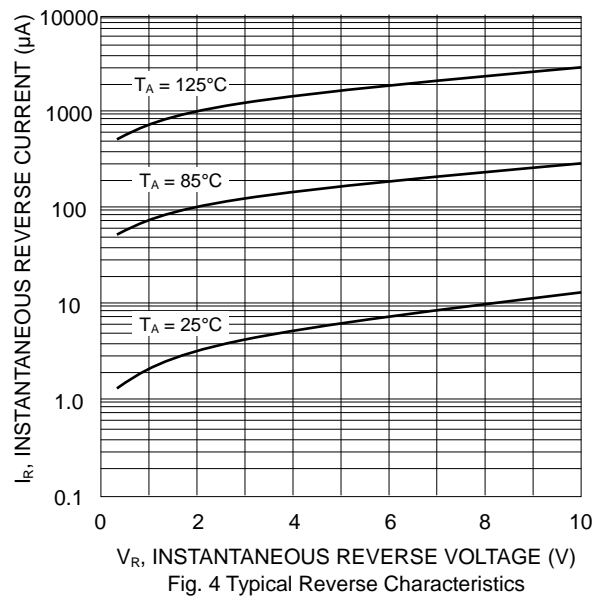
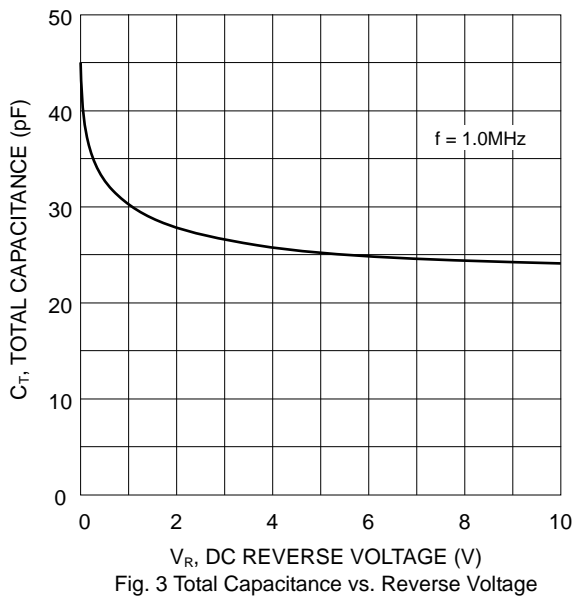
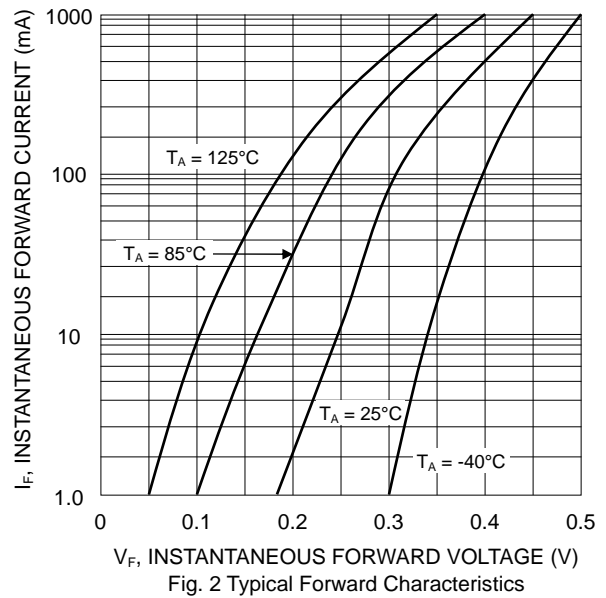
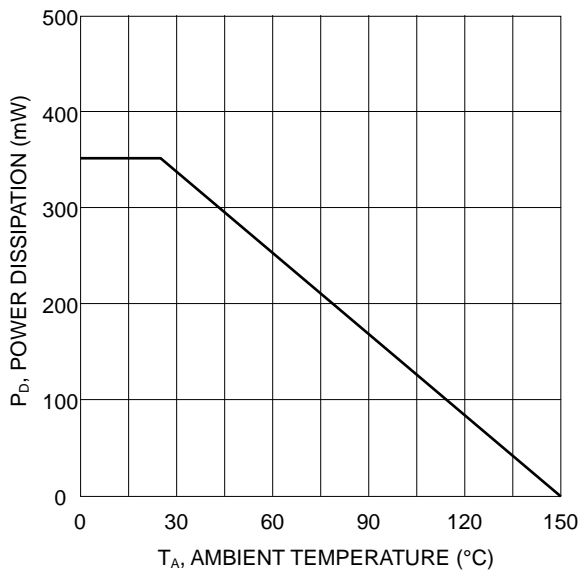
Thermal Characteristics

| Characteristic | Symbol | Value | Unit |
|--|----------|-------|------|
| Power Dissipation (Note 1) | P_D | 350 | mW |
| Thermal Resistance, Junction to Ambient (Note 1) | R_{JA} | 160 | K/W |

Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|---|--------|------|------------------------------|------------------------------|---------------|
| Forward Voltage Drop @ $I_F = 10\text{mA}$ @ $I_F = 100\text{mA}$ @ $I_F = 500\text{mA}$ @ $I_F = 1000\text{mA}$ | V_F | | 0.24 0.32 0.40 0.48 | 0.30 0.38 0.50 0.60 | V |
| Reverse Leakage Current @ $V_R = 5.0\text{V}, T_A = 25^\circ\text{C}$ @ $V_R = 5.0\text{V}, T_A = 80^\circ\text{C}$ @ $V_R = 8.0\text{V}, T_A = 25^\circ\text{C}$ @ $V_R = 8.0\text{V}, T_A = 80^\circ\text{C}$ | I_R | | 5.0 100 10 410 | 15 800 25 1500 | μA |
| Diode Capacitance ($V_R = 5.0\text{V}, f = 1.0\text{MHz}$) | C_D | | 25 | 30 | pF |

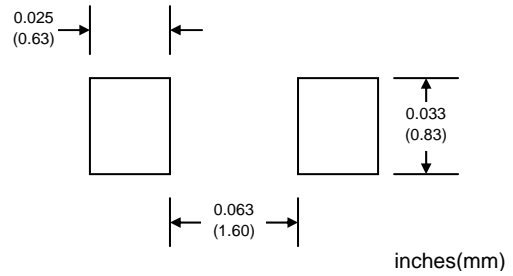


MARKING INFORMATION



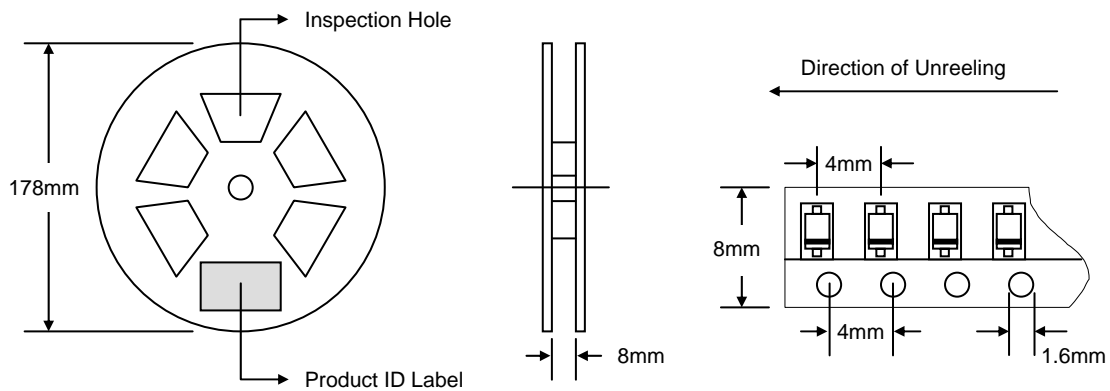
Cathode = Polarity Band
W5 = Device Code

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL



| Reel Diameter (mm) | Quantity (PCS) | Inner Box Size L x W x H (mm) | Quantity (PCS) | Carton Size L x W x H (mm) | Quantity (PCS) | Approx. Gross Weight (KG) |
|--------------------|----------------|-------------------------------|----------------|----------------------------|----------------|---------------------------|
| 178 | 3,000 | 187 x 187 x 65 | 15,000 | 390 x 240 x 420 | 150,000 | 7.0 |

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
2. Components are packed in accordance with EIA standard 481-1 and 481-2.

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| BAT60B-T1 | SOD-323 | 3000/Tape & Reel |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, BAT60B-T1-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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