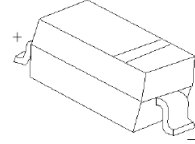




**SOD-323 Plastic-Encapsulate Diodes**

**BAT54WS** Schottky Barrier Diode

SOD-323



**FEATURES**

- Extremely Fast Switching Speed
- Low Forward Voltage

**MARKING: L9**

**Maximum Ratings @Ta=25°C**

| Parameter                              | Symbol          | Limit    | Unit |
|--|-----------------|----------|------|
| Non-Repetitive Peak Reverse Voltage    | $V_{RM}$        | 30       | V    |
| DC Blocking Voltage                    | $V_R$           | 21       | V    |
| Average Rectified Output Current       | $I_O$           | 100      | mA   |
| Forward Continuous Current             | $I_F$           | 200      | mA   |
| Repetitive Peak Forward Current        | $I_{FRM}$       | 300      | mA   |
| Forward Surge Current                  | $I_{FSM}$       | 600      | mA   |
| Power Dissipation                      | $P_D$           | 200      | mW   |
| Thermal Resistance Junction to Ambient | $R_{\theta JA}$ | 500      | °C/W |
| Junction Temperature                   | $T_J$           | 125      | °C   |
| Storage Temperature Range              | $T_{STG}$       | -55~+150 | °C   |

**Electrical Characteristics @Ta=25°C**

| Parameter                     | Symbol     | Conditions                                       | Min | Typ | Max  | Unit |
|-------------------------------|------------|--|-----|-----|------|------|
| Reverse breakdown voltage     | $V_{(BR)}$ | $I_R=100\mu A$                                   | 30  |     |      | V    |
| Forward voltage               | $V_{F1}$   | $I_F=0.1mA$                                      |     |     | 240  | mV   |
|                               | $V_{F2}$   | $I_F=1.0mA$                                      |     |     | 320  | mV   |
|                               | $V_{F3}$   | $I_F=10mA$                                       |     |     | 400  | mV   |
|                               | $V_{F4}$   | $I_F=30mA$                                       |     |     | 500  | mV   |
|                               | $V_{F5}$   | $I_F=100mA$                                      |     |     | 1000 | mV   |
| Reverse current               | $I_R$      | $V_R=25V$  |     |     | 2.0  | uA   |
| Reverse recovery time         | $t_{rr}$   | $I_F=10mA, I_R=10mA$ to 1mA ,<br>$R_L=100\Omega$ |     |     | 5.0  | ns   |
| Capacitance between terminals | $C_T$      | $V_R=1V, f=1MHz$                                 |     |     | 10   | pF   |

# Typical Characteristics

# BAT54WS

