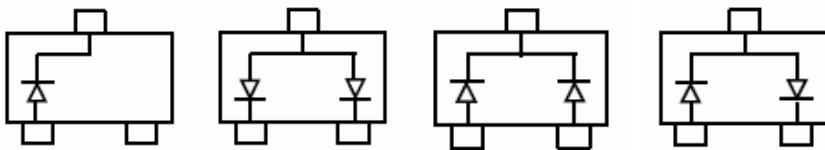
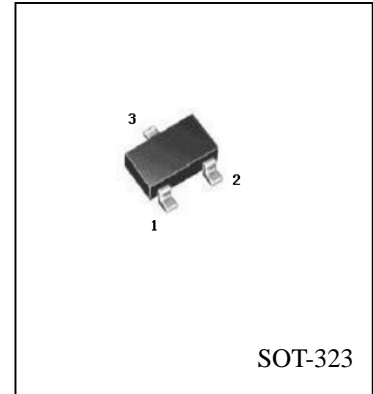


BAT54W/AW/CW/SW

FEATURES

- Extremely Fast Switching Speed
- Low forward voltage



BAT54W : KL5 BAT54AW : KL6 BAT54CW : KL 7 BAT54SW : KL8

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|-----------------|----------|-----------------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 30 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| Forward Continuous Current | I_{FM} | 200 | mA |
| Non-repetitive Peak Forward Surge Current @ $t < 1\text{s}$ | I_{FSM} | 600 | mA |
| Repetitive Peak Forward Current @ $t \leq 1\text{s}, \delta \leq 0.5$ | I_{FRM} | 300 | mA |
| Power Dissipation | P_D | 200 | mW |
| Thermal Resistance from Junction to Ambient | $R_{\theta JA}$ | 500 | $^{\circ}\text{C}/\text{W}$ |
| Junction Temperature | T_j | 125 | $^{\circ}\text{C}$ |
| Storage Temperature | T_{stg} | -55~+150 | $^{\circ}\text{C}$ |

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

| Parameter | Symbol | Test conditions | Min | Typ | Max | Unit |
|-----------------------|------------|---|-----|-----|------|---------------|
| Reverse voltage | $V_{(BR)}$ | $I_R=100\mu\text{A}$ | 30 | | | V |
| Reverse current | I_R | $V_R=25\text{V}$ | | | 2 | μA |
| Forward voltage | V_F | $I_{F1}=0.1\text{mA}$ | | | 0.24 | V |
| | | $I_{F2}=1\text{mA}$ | | | 0.32 | V |
| | | $I_{F3}=10\text{mA}$ | | | 0.40 | V |
| | | $I_{F4}=30\text{mA}$ | | | 0.50 | V |
| | | $I_{F5}=100\text{mA}$ | | | 1 | V |
| Diode capacitance | C_D | $V_R=0\text{V}, f=1\text{MHz}$ | | | 10 | pF |
| Reverse recovery time | t_{rr} | $I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$ | | | 5 | ns |

BAT54W/AW/CW/SW

