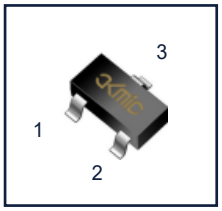
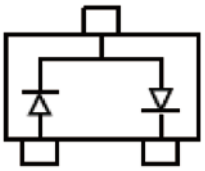
## Features

- Low forward and reverse recovery times.



SOT23


Equivalent Circuit

## Absolute Maximum Ratings($T_A$=25℃)

| Symbol | Parameter | Value | Uniat |
|---|---|---|---|
| $V_{RRM}$ | Peak Repetitive Peak Reverse Voltage | 30 | V |
| $V_{RWM}$ | Working Peak Reverse Voltage | | |
| $V_R$ | DC Blocking Voltage | | |
| $I_{FM}$ | Forward Continuous Current | 200 | mA |
| $I_{FSM}$ | Non-repetitive Peak Forward Surge Current@8.3mS | 600 | mA |
| $I_{FRM}$ | Repetitive peak forward surge current | 300 | mA |
| $P_d$ | Power Dissipation | 200 | mW |
| $R_{\theta JA}$ | Thermal Resistance From Junction To Ambient | 400 | ℃/W |
| $T_J$ | Operation Junction Temperature Range | -40~+125 | ℃ |
| $T_{stg}$ | Storage Temperature Range | -55~+150 | ℃ |

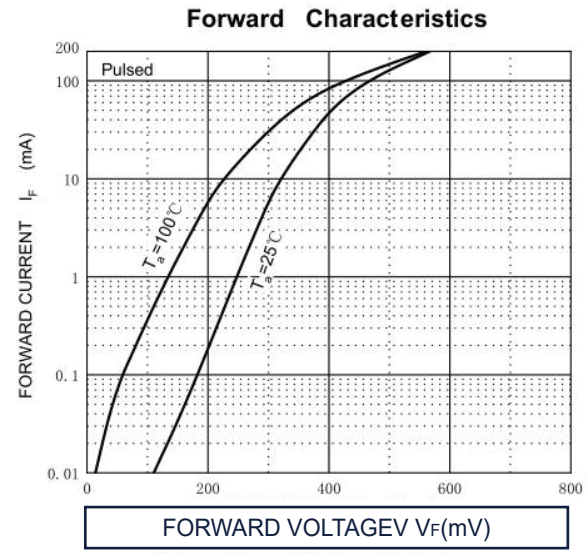
## Electrical Characteristics ($T_A$=25℃ unless otherwise specified)

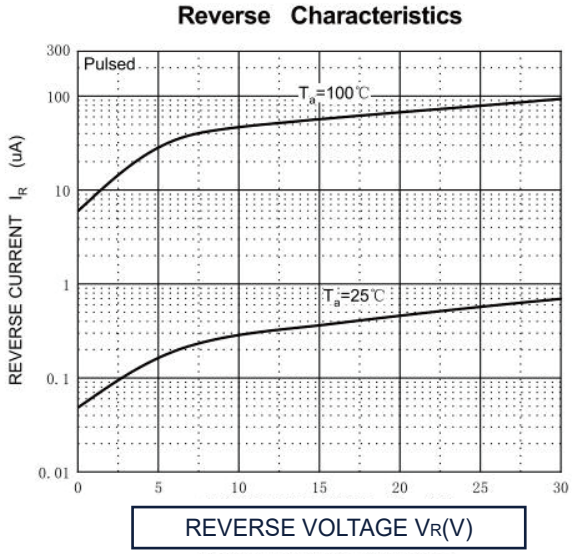
| Symbol | Parameter | Test conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| $V_{(BR)}$ | Reverse breakdown voltage | $I_R$=100μA | 30 | | | V |
| $I_R$ | Reverse current | $V_R$=25V | | | 2 | μA |
| $V_F$ | Forward voltage | $I_F$=0.1mA | | | 0.24 | V |
| | | $I_F$=1mA | | | 0.32 | V |
| | | $I_F$=10mA | | | 0.40 | V |
| | | $I_F$=30mA | | | 0.50 | V |
| | | $I_F$=100mA | | | 1.0 | V |
| $C_D$ | Diode capacitance | $V_R$=1V, f=1MHz | | | 10 | pF |
| $t_{rr}$ | Reverse recovery time | $I_F$=$I_R$=10mA,Irr=0.1X$I_R$,$R_L$=100Ω | | | 5 | nS |

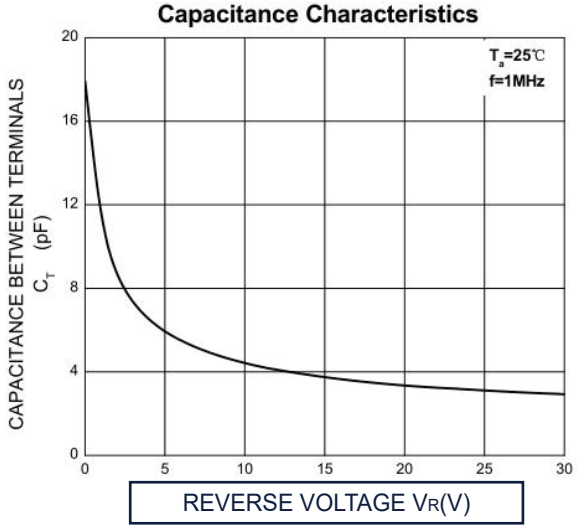
## Ordering information

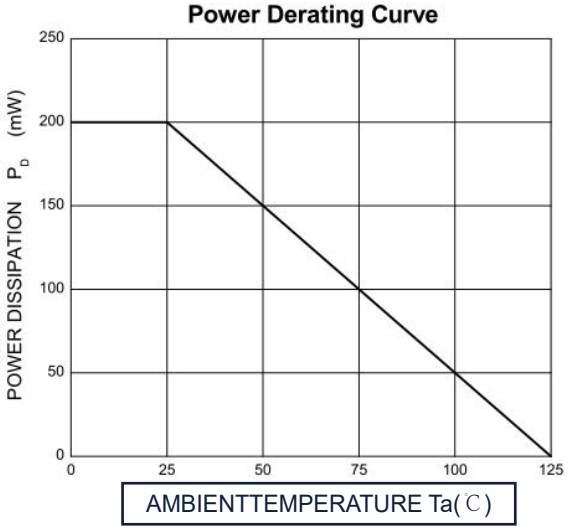
| Product ID | Marking | Naming rule | Pack | Qty(PCS) |
|---|---|---|---|---|
| BAT54S | KL4 | BAT54S<br>产品名称<br>product name | SOT23 | 3000 |

## Typical Characteristics

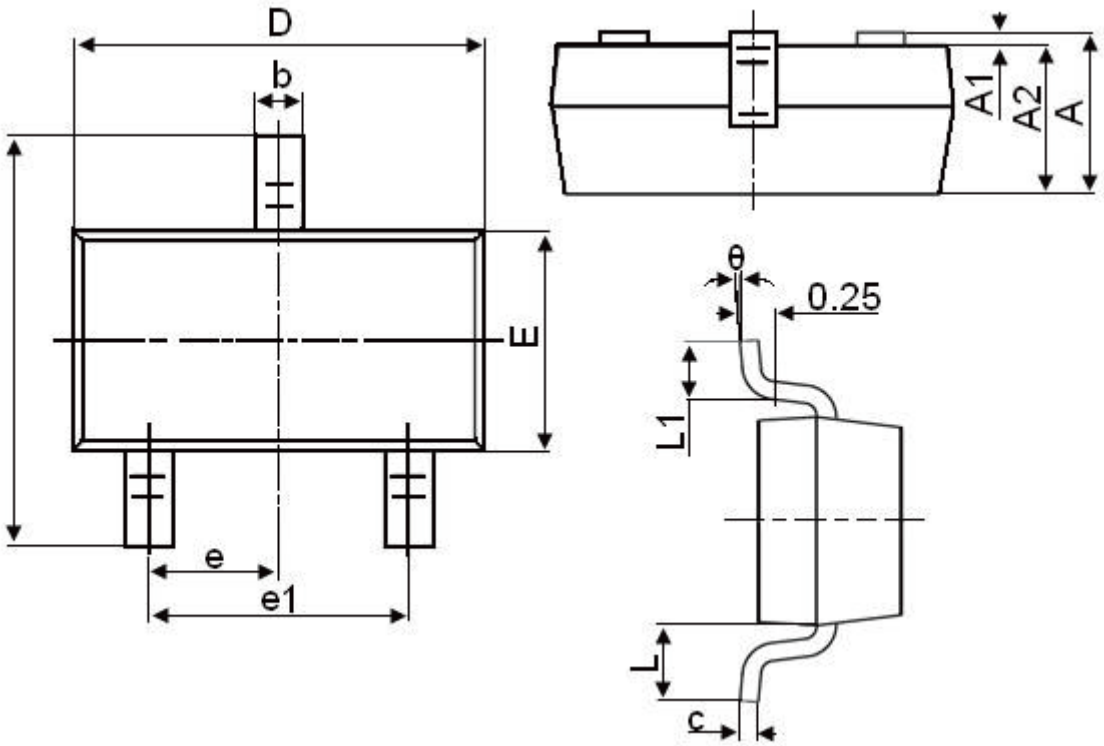


## SOT23 Package Outline Dimensions




| Symbol | Dimensions in Millimeters | |
|---|---|---|
| | mm | |
| | Min | Max |
| A | 0.900 | 1.150 |
| A1 | 0.000 | 0.100 |
| A2 | 0.900 | 1.050 |
| b | 0.300 | 0.500 |
| c | 0.080 | 0.150 |
| D | 2.800 | 3.000 |
| E | 1.200 | 1.400 |
| E1 | 2.250 | 2.550 |
| e | 0.950TYP | |
| e1 | 1.800 | 2.000 |
| L | 0.550REF | |
| L1 | 0.300 | 0.500 |
| θ | 0° | 8° |