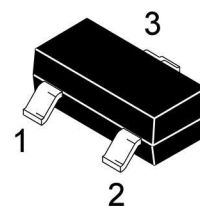


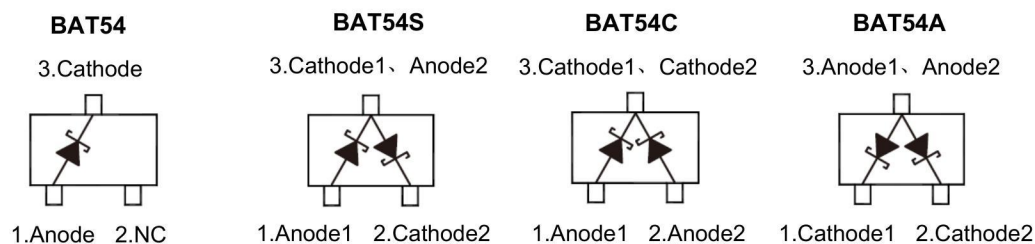
### Features

- Small package
- Small capacitance

### SOT-23



### Equivalent Circuit



### Marking Code :

BAT54 : L4  
 BAT54S : L44  
 BAT54C : L43  
 BAT54A : L42

### Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ )

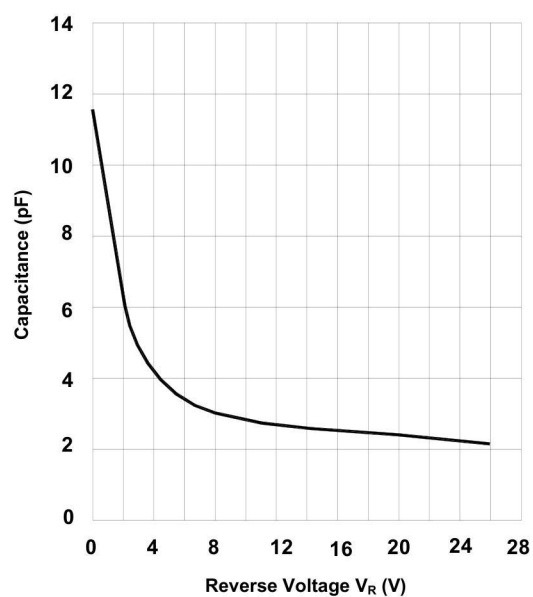
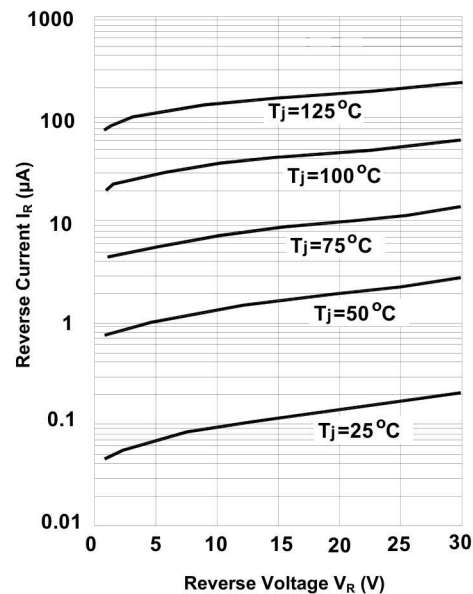
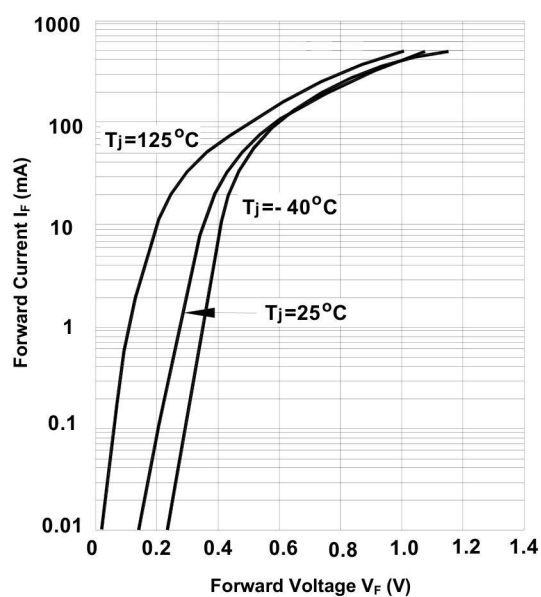
| Parameter                                       | Symbols         | Value       | Unit               |
|-------------------------------------------------|-----------------|-------------|--------------------|
| Repetitive Peak Reverse Voltage                 | $V_{RRM}$       | 30          | V                  |
| Average Rectified Forward Current               | $I_{F(AV)}$     | 200         | mA                 |
| Repetitive Peak Forward Current                 | $I_{FRM}$       | 300         | mA                 |
| Non-Repetitive Peak Forward Surge Current at 1s | $I_{FSM}$       | 600         | mA                 |
| Power Dissipation                               | $P_D$           | 290         | mW                 |
| Thermal Resistance Junction to Ambient Air      | $R_{\theta JA}$ | 430         | $^\circ\text{C/W}$ |
| Junction Temperature                            | $T_J$           | 150         | $^\circ\text{C}$   |
| Storage Temperature Range                       | $T_{STG}$       | -55 to +150 | $^\circ\text{C}$   |

**Electrical Characteristics ( $T_A=25^{\circ}\text{C}$ )**

| Parameter                                                                                                                                                    | Symbols     | Min.                       | Max.                             | Unit          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------------------|----------------------------------|---------------|
| Forward Voltage<br>at $I_F = 0.1 \text{ mA}$<br>at $I_F = 1 \text{ mA}$<br>at $I_F = 10 \text{ mA}$<br>at $I_F = 30 \text{ mA}$<br>at $I_F = 100 \text{ mA}$ | $V_F$       | --<br>--<br>--<br>--<br>-- | 240<br>320<br>400<br>500<br>1000 | mV            |
| Reverse Current<br>at $V_R = 25 \text{ V}$                                                                                                                   | $I_R$       | --                         | 2                                | $\mu\text{A}$ |
| Breakdown Voltage<br>at $I_R = 10 \mu\text{A}$                                                                                                               | $V_{R(BR)}$ | 30                         | --                               | V             |
| Total Capacitance<br>at $V_R = 1 \text{ V}$ , $f = 1 \text{ MHz}$                                                                                            | $C_T$       | --                         | 10                               | pF            |
| Reverse Recovery Time<br>at $I_F = 10 \text{ mA}$ , $I_R = 10 \text{ mA}$ , $I_{RR} = 1 \text{ mA}$ , $R_L = 100 \Omega$                                     | $T_{rr}$    | --                         | 5                                | ns            |



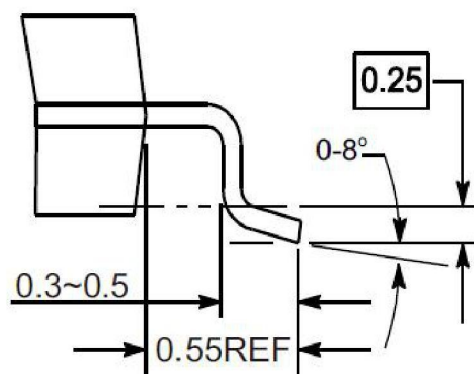
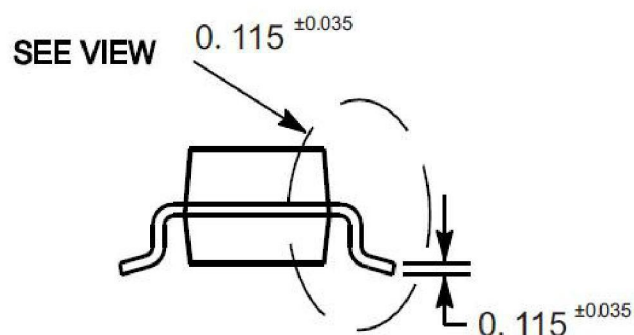
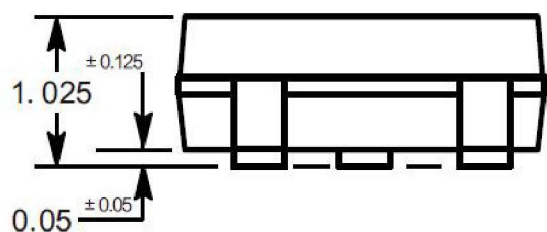
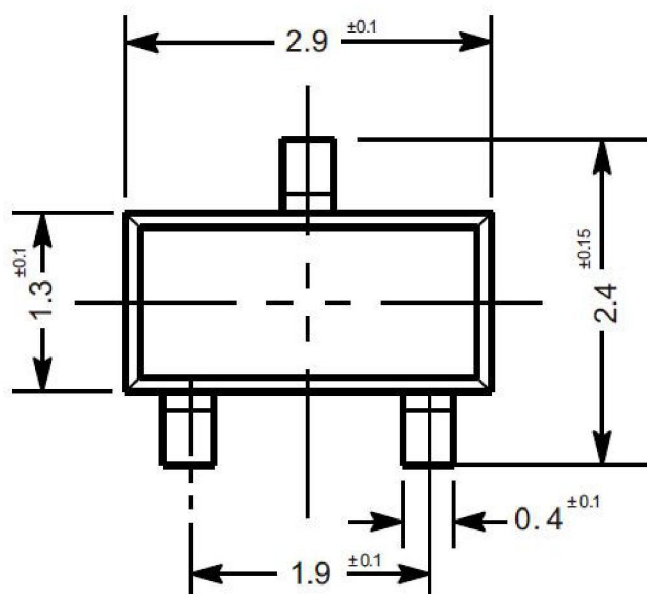
### Typical Characteristic Curves



## Package Outline

SOT-23

Dimensions in mm



VIEW C

## Ordering Information

| Device       | Package | Shipping              |
|--------------|---------|-----------------------|
| BAT54 Series | SOT-23  | 3,000PCS/Reel&7inches |