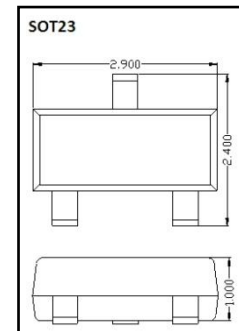


## Schottky Barrier DIODE / DATA SHEET

### BAT54-BAT54S

- ◇ High Conductance
- ◇ Low Current Leakage
- ◇ Small Outline Surface Mount Package
- ◇ RoHS compliant / Green EMC



| MCC Catalog Number | Device Marking |        | Type   | Pin Configuration<br>See page 2 |
|--------------------|----------------|--------|--------|---------------------------------|
|                    | 1              | 2      |        |                                 |
| BAT54              | KL1            | L4/L4P | Single | Figure1                         |
| BAT54A             | KL2            | L42    | Dual   | Figure2                         |
| BAT54C             | KL3            | L43    | Dual   | Figure3                         |
| BAT54S             | KL4            | L44    | Dual   | Figure4                         |

#### MAXIMUM RATINGS (Ta = 25 °C)

| Symbol    | Parameter   | Value      | Units |
|-----------|---|------------|-------|
| $V_R$     | Reverse Voltage                                     | 30         | V     |
| $I_F$     | Forward Continuous Current                          | 200        | mA    |
| $P_{tot}$ | Power Dissipation                                   | 200        | mW    |
| $T_J$     | Operating Junction Temperature Range                | -55 to 125 | °C    |
| $I_{FSM}$ | Peak Forward Surge Current<br>(t=1S.NON-Repetitive) | 1          | A     |
| $T_{stg}$ | Storage Temperature Rance                           | -55 to 150 | °C    |
| $T_J$     | Soldering temperature during                        | 260        | °C    |
| $R_j$     | Thermal Resistance Junction to Ambient              | 500        | °C/W  |

#### ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

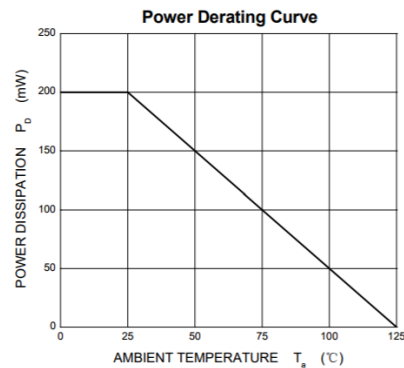
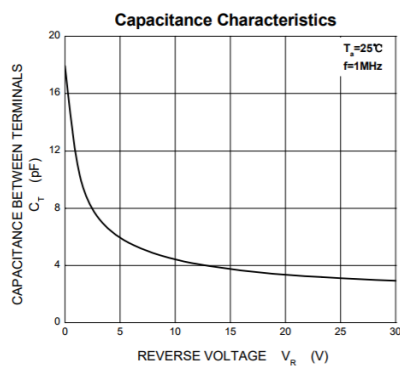
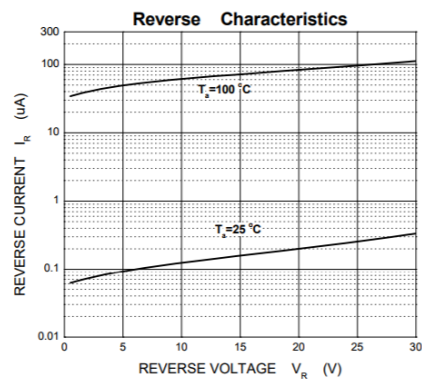
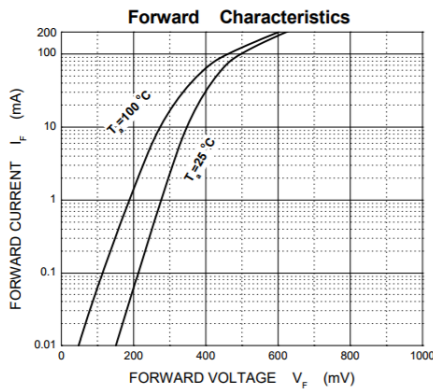
| Symbol   | Parameter                       | Test Conditions                 | Min | Max  | Units |
|----------|---------------------------------|---------------------------------|-----|------|-------|
| $V_F$    | Forward Voltage                 | $I_F=0.1mA$                     |     | 0.24 | V     |
|          |                                 | $I_F=1mA$                       |     | 0.32 |       |
|          |                                 | $I_F=10mA$                      |     | 0.40 |       |
|          |                                 | $I_F=30mA$                      |     | 0.50 |       |
|          |                                 | $I_F=100mA$                     |     | 1.00 |       |
| $V_R$    | Reverse breakdown voltage       | $I_R=100uA$                     | 30  |      | V     |
| $I_R$    | Reverse voltage leakage current | $V_R=25V$                       |     | 10   | uA    |
| $C_J$    | Typical Junction Capacitance    | $V_R=1V, f=1.0MHz$              |     | 10   | pF    |
| $T_{rr}$ | Reverse recovery time           | $I_F=I_R=10mA, I_{rr}=0.1x I_R$ |     | 5    | nS    |



ANMEI Semiconductor

|  |  |                 |  |
|--|--|-----------------|--|
|  |  | $R_L=100\Omega$ |  |
|--|--|-----------------|--|

**Typical Characteristics**



**Pin Configuration - Top View**

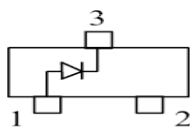


Figure 1  
BAT54

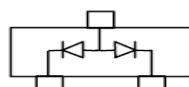


Figure 2  
BAT54A

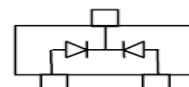


Figure 3  
BAT54C

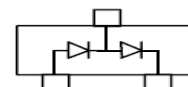


Figure 4  
BAT54S

**ORDERING INFORMATION**

| Device       | Package | Shipping                        | Tape wide | Emboss pitch | Tape specification | Notes |
|--------------|---------|---------------------------------|-----------|--------------|--------------------|-------|
| BAT54-BAT54S | SOT23   | Tape & Reel<br>3000pcs /7" Reel | 8mm       | 4mm          | Conductive         |       |



ANMEI Semiconductor

### PACKAGE DIMENSIONS

