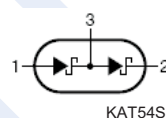
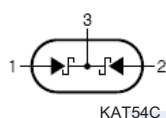
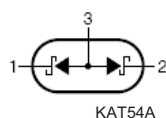
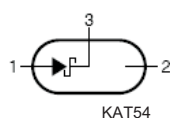
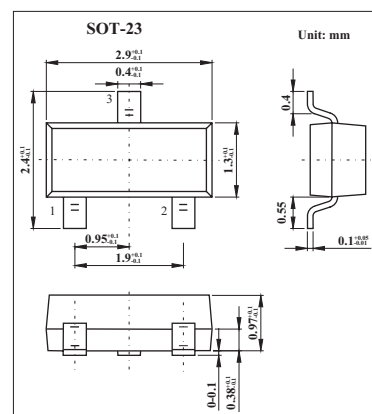


## Schottky Diodes

### KAT54/A/C/S(BAT54/A/C/S)

#### ■ Features

- Low forward voltage
- Guard ring protected
- Small plastic SMD package.



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter                                                             | Symbol          | Rating      | Unit                      |
|-----------------------------------------------------------------------|-----------------|-------------|---------------------------|
| Maximum Repetitive Reverse Voltage                                    | $V_{RRM}$       | 30          | V                         |
| Average Rectified Forward Current                                     | $I_{F(AV)}$     | 200         | mA                        |
| Non-repetitive Peak Forward Surge Current<br>Pulse width = 1.0 second | $I_{FSM}$       | 600         | mA                        |
| Power Dissipation                                                     | $P_D$           | 290         | mW                        |
| Thermal Resistance, Junction to Ambient                               | $R_{\theta JA}$ | 430         | $^\circ\text{C}/\text{W}$ |
| Storage Temperature Range                                             | $T_{stg}$       | -55 to +150 | $^\circ\text{C}$          |
| Operating Junction Temperature                                        | $T_J$           | 150         | $^\circ\text{C}$          |

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

| Parameter             | Symbol   | Testconditions                                                         | Min | Typ | Max | Unit          |
|-----------------------|----------|------------------------------------------------------------------------|-----|-----|-----|---------------|
| Breakdown Voltage     | $V_R$    | $I_R = 10 \mu\text{A}$                                                 | 30  |     |     | V             |
| Forward Voltage       | $V_F$    | $I_F = 0.1 \text{ mA}$                                                 |     |     | 240 | mV            |
|                       |          | $I_F = 1 \text{ mA}$                                                   |     |     | 320 | mV            |
|                       |          | $I_F = 10 \text{ mA}$                                                  |     |     | 400 | mV            |
|                       |          | $I_F = 30 \text{ mA}$                                                  |     |     | 500 | mV            |
|                       |          | $I_F = 100 \text{ mA}$                                                 |     |     | 1.0 | V             |
| Reverse Current       | $I_R$    | $V_R = 25 \text{ V}$                                                   |     |     | 2   | $\mu\text{A}$ |
| Total Capacitance     | $C_T$    | $V_R = 1 \text{ V}, f = 1.0 \text{ MHz}$                               |     |     | 10  | pF            |
| Reverse Recovery Time | $t_{rr}$ | $I_F = I_R = 10 \text{ mA}, I_{RR} = 1.0 \text{ mA}, R_L = 100 \Omega$ |     |     | 5   | ns            |

#### ■ hFE Classification

| TYPE    | KAT54 | KAT54A     | KAT54C     | KAT54S     |
|---------|-------|------------|------------|------------|
| Marking | L4    | L42 or WV3 | L43 or WW1 | L44 or WV4 |

## KAT54/A/C/S(BAT54/A/C/S)

## ■ Typical Characteristics

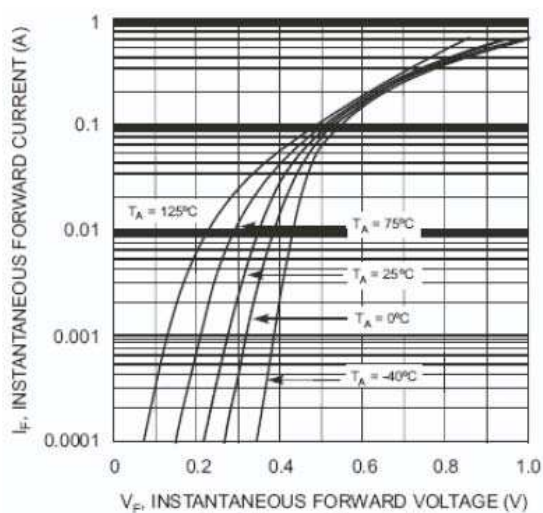


Fig.1 Forward Characteristics

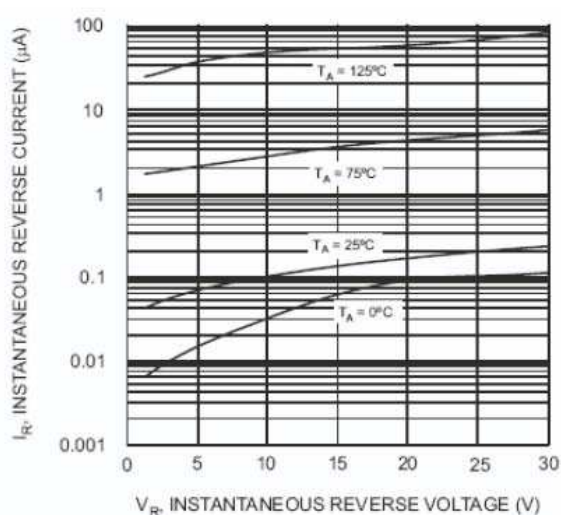


Fig.2 Typical Reverse Characteristics

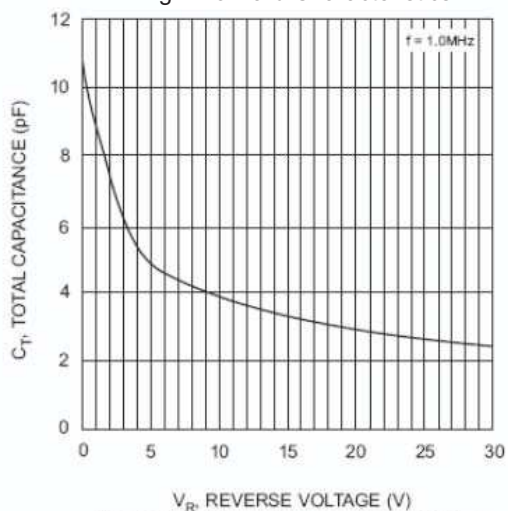


Fig.3 Typical Capacitance vs. Reverse Voltage

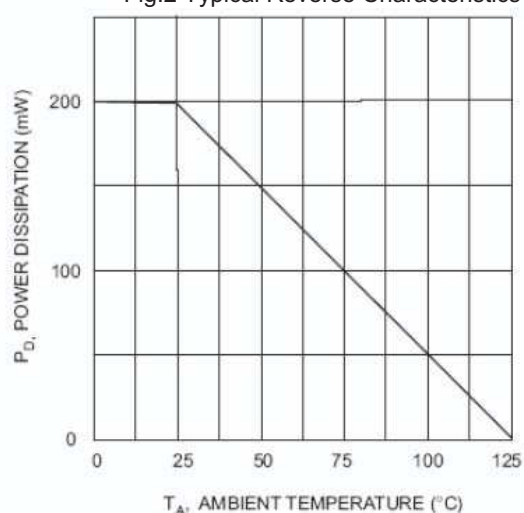


Fig.4 Power Derating Curve