

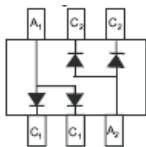
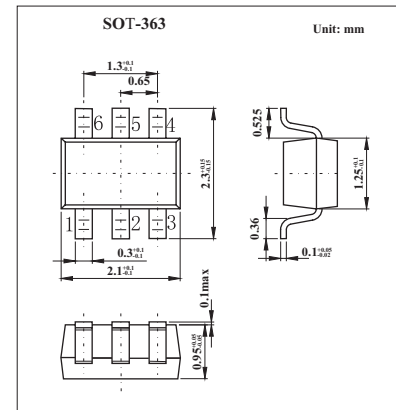
## Surface Mount Schottky Barrier Diode Arrays

## KAT54TW,ADW,CDW,SDW,BRW

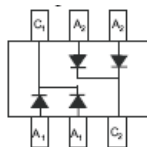
(BAT54TW,ADW,CDW,SDW,BRW)

## ■ Features

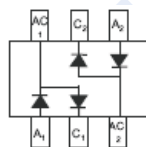
- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection



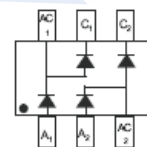
KAT54ADW



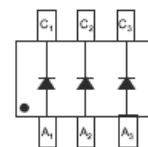
KAT54CDW



KAT54SDW



KAT54BRW



KAT54TW

## ■ Absolute Maximum Ratings Ta = 25°C

| Parameter                                    | Symbol   | Rating      | Unit |
|--|----------|-------------|------|
| Peak Repetitive Reverse Voltage              | VRRM     |             |      |
| Working Peak Reverse Voltage                 | VRWM     | 30          | V    |
| DC Blocking Voltage                          | VR       |             |      |
| Forward Continuous Current *                 | IF       | 200         | mA   |
| Repetitive Peak Forward Current *            | IFRM     | 300         | mA   |
| Forward Surge Current * @ t < 1.0s           | IFSM     | 600         | mA   |
| Power Dissipation*                           | Pd       | 200         | mW   |
| Thermal Resistance, Junction to Ambient Air* | RθJA     | 625         | °C/W |
| Operating and Storage Temperature Range      | Tj, TSTG | -65 to +125 | °C   |

\*. Device mounted on FR-4 PCB, 1 inch X 0.85 inch X 0.062 inch;

## KAT54TW,ADW,CDW,SDW,BRW (BAT54TW,ADW,CDW,SDW,BRW)

### ■ Electrical Characteristics Ta = 25°C

| Parameter                   | Symbol     | Testconditions  | Min | Typ | Max                              | Unit    |
|-----------------------------|------------|---|-----|-----|----------------------------------|---------|
| Reverse Breakdown Voltage * | $V_{(BR)}$ | $I_R = 100 \mu A$   | 30  |     |                                  | V       |
| Maximum Forward Voltage *   | $V_{FM}$   | $I_F = 0.1mA$<br>$I_F = 1mA$<br>$I_F = 10mA$<br>$I_F = 30mA$<br>$I_F = 100mA$ |     |     | 240<br>320<br>400<br>500<br>1000 | mV      |
| Peak Reverse Current 8      | $I_R$      | $V_R = 25V$   |     |     | 2.0                              | $\mu A$ |
| Junction Capacitance        | $C_j$      | $V_R = 1.0V, f = 1.0MHz$  |     |     | 10                               | pF      |
| Reverse Recovery Time       | $t_{rr}$   | $I_F = 10mA$ through $I_R = 10mA$ to $I_R = 1.0mA, R_L = 100 \Omega$          |     |     | 5                                | ns      |

\* Short duration test pulse used to minimize self-heating effect.

### ■ Marking

| NO.     | KAT54ADW | KAT54CDW | KAT54SDW | KAT54BRW | KAT54TW |
|---------|----------|----------|----------|----------|---------|
| Marking | KL6      | KL7      | KL8      | KLB      | KLA     |