



DONGGUAN NANJING ELECTRONICS LTD.,

## SOT-23 Plastic-Encapsulate Diodes

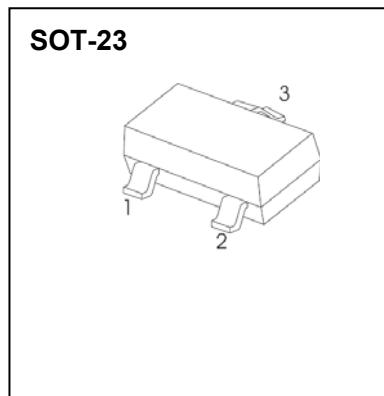
### BAV23A/C/S

SCHOTTKY BARRIER DIODE

#### FEATURES

- Fast Switching Speed
- High Conductance
- For General Purpose Switching Applications

| BAV23A       | BAV23C       | BAV23S        |
|--------------|--------------|---------------|
|              |              |               |
| MARKING: KT7 | MARKING: KT6 | MARKING: KL31 |



#### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ unless otherwise noted )

| Symbol              | Parameter  | Value    | Unit |
|---------------------|--|----------|------|
| $V_{RRM}$           | Peak Repetitive Reverse Voltage                              | 250      | V    |
| $V_{RWM}$           | Working Peak Reverse Voltage                                 |          |      |
| $V_{R(\text{RMS})}$ | RMS Reverse Voltage  | 175      | V    |
| $I_o$               | Average Rectified Output Current                             | 400      | mA   |
| $I_{FSM}$           | Non-repetitive Peak Forward Surge Current @ $t=1\mu\text{s}$ | 9        | A    |
|                     | @ $t=100\mu\text{s}$   | 3        | A    |
|                     | @ $t=10\text{ms}$  | 1.7      | A    |
| $P_D$               | Power Dissipation  | 350      | mW   |
| $R_{\theta JA}$     | Thermal Resistance from Junction to Ambient                  | 286      | °C/W |
| $T_j$               | Junction Temperature   | 125      | °C   |
| $T_{stg}$           | Storage Temperature  | -55~+150 | °C   |

#### ELECTRICAL CHARACTERISTICS( $T_a=25^\circ\text{C}$ unless otherwise specified)

| Parameter             | Symbol     | Test conditions   | Min | Typ | Max  | Unit          |
|-----------------------|------------|---|-----|-----|------|---------------|
| Reverse voltage       | $V_{(BR)}$ | $I_R=100\mu\text{A}$  | 250 |     |      | V             |
| Reverse current       | $I_R$      | $V_R=250\text{V}$   |     |     | 0.1  | $\mu\text{A}$ |
| Forward voltage       | $V_F$      | $I_F=100\text{mA}$  |     |     | 1    | V             |
|                       |            | $I_F=200\text{mA}$  |     |     | 1.25 |               |
| Total capacitance     | $C_{tot}$  | $V_R=0\text{V}, f=1\text{MHz}$                                      |     |     | 5    | pF            |
| Reverse recovery time | $t_{rr}$   | $I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$ |     |     | 50   | ns            |