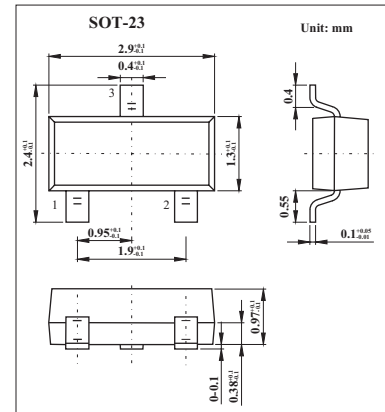


## Schottky barrier (double) diodes

## BAS70 series

## ■ Features

- Low forward current
- High breakdown voltage
- Guard ring protected
- Small plastic SMD package
- Low diode capacitance.

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

| Parameter                                   | Symbol        | Conditions                              | Min | Max  | Unit             |
|---|---------------|---|-----|------|------------------|
| Continuous reverse voltage                  | $V_R$         |   |     | 70   | V                |
| Continuous forward current                  | $I_F$         |   |     | 70   | mA               |
| Repetitive peak forward current             | $I_{FRM}$     | $t_p \leq 1 \text{ s}; \delta \leq 0.5$ |     | 70   | mA               |
| Non-repetitive peak forward current         | $I_{FSM}$     | $t_p < 10 \text{ ms}$                   |     | 100  | mA               |
| Storage temperature                         | $T_{stg}$     |   | -65 | +150 | $^\circ\text{C}$ |
| Junction temperature                        | $T_j$         |   |     | 150  | $^\circ\text{C}$ |
| Operating ambient temperature               | $T_{amb}$     |   | -65 | +150 | $^\circ\text{C}$ |
| thermal resistance from junction to ambient | $R_{th\ j-a}$ |   |     | 500  | K/W              |

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

| Parameter                                  | Symbol | Conditions                           | Max | Unit          |
|--|--------|--------------------------------------|-----|---------------|
| Forward voltage                            | $V_F$  | $I_F = 1 \text{ mA}$                 | 410 | mV            |
|  |        | $I_F = 10 \text{ mA}$                | 750 | mV            |
|  |        | $I_F = 15 \text{ mA}$                | 1   | V             |
| Reverse voltage leakage current            | $I_R$  | $V_R = 50 \text{ V}; \text{ note 1}$ | 100 | nA            |
|  |        | $V_R = 70 \text{ V}; \text{ note 1}$ | 10  | $\mu\text{A}$ |
| Charge carrier life time (Krakauer method) | $\tau$ | $I_F = 5 \text{ mA}$                 | 100 | ps            |
| Diode capacitance                          | $C_d$  | $f = 1 \text{ MHz}; V_R = 0;$        | 2   | pF            |

Note

1. Pulse test:  $t_p = 300 \mu\text{s}; \delta = 0.02$

## ■ Marking

| Type    | BAS70 | BAS70-04 | BAS70-05 | BAS70-06 | BAS70-07 |
|---------|-------|----------|----------|----------|----------|
| Marking | 73*   | 74*      | 75*      | 76*      | 77p      |