

SMD Type Diodes

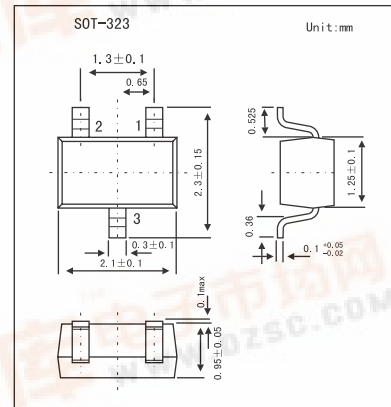
## Silicon Schottky Diodes

### BAS125W;BAS125-04W

### BAS125-05W;BAS125-06W

■ Features

- For low-loss, fast-recovery, meter protection, bias isolation and clamping application
- Integrated diffused guard ring
- Low forward voltage



■ Absolute Maximum Ratings Ta = 25°C

| Parameter                                   | Symbol            | Value       | Unit |
|---|-------------------|-------------|------|
| Diode reverse voltage                       | V <sub>R</sub>    | 25          | V    |
| Forward current                             | I <sub>F</sub>    | 100         | mA   |
| Surge forward current (t ≤ 10ms)            | I <sub>FSM</sub>  | 500         | mA   |
| Total Power dissipation Ts ≤ 25°C           | P <sub>tot</sub>  | 250         | mW   |
| Junction temperature                        | T <sub>j</sub>    | 150         | °C   |
| Storage temperature                         | T <sub>stg</sub>  | -50 to +150 | °C   |
| Junction ambient BAS125W (Note 1)           | R <sub>thJA</sub> | ≤ 310       | K/W  |
| Junction ambient BAS125-04W...06W (Note 1)  | R <sub>thJA</sub> | ≤ 425       | K/W  |
| Junction - soldering point BAS125W          | R <sub>thJS</sub> | ≤ 230       | K/W  |
| Junction - soldering point BAS125-04W...06W | R <sub>thJS</sub> | ≤ 265       | K/W  |

Note

Package mounted on alumina 15mm × 16.7mm × 0.7mm

■ Electrical Characteristics Ta = 25°C

| Parameter                       | Symbol         | Test Conditions                   | Min | Typ | Max | Unit |
|---------------------------------|----------------|-----------------------------------|-----|-----|-----|------|
| Reverse current                 | I <sub>R</sub> | V <sub>R</sub> = 20 V             |     |     | 150 | nA   |
|                                 |                | V <sub>R</sub> = 25 V             |     |     | 200 |      |
| Forward voltage                 | V <sub>F</sub> | I <sub>F</sub> = 1 mA             |     | 385 | 400 | mV   |
|                                 |                | I <sub>F</sub> = 10 mA            |     | 530 | 650 |      |
|                                 |                | I <sub>F</sub> = 35 mA            |     | 800 | 900 |      |
| Diode capacitance               | C <sub>T</sub> | V <sub>R</sub> = 0 V, f = 1 MHz   |     |     | 1.1 | pF   |
| Differential forward resistance | R <sub>F</sub> | I <sub>F</sub> = 5 mA, f = 10 KHz |     | 16  |     | Ω    |

■ Marking

| Type    | BAS125W | BAS125-04W | BAS125-05W | BAS125-06W |
|---------|---------|------------|------------|------------|
| Marking | 13s     | 14s        | 15s        | 16s        |

