

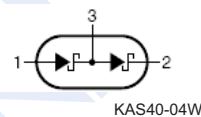
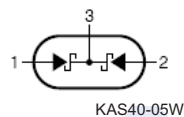
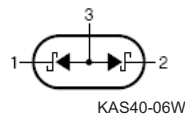
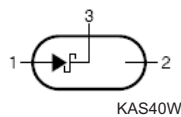
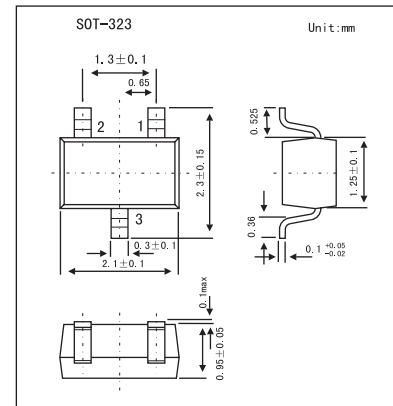
## Surface Mount Schottky Barrier Diode

### KAS40W,-04W,-05W,-06W

(BAS40W,-04W,-05W,-06W)

#### ■ Features

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



#### ■ Absolute Maximum Ratings Ta = 25°C

| Parameter                                   | Symbol              | Rating      | Unit |
|---------------------------------------------|---------------------|-------------|------|
| Peak Repetitive Reverse Voltage             | V <sub>RRM</sub>    | 40          | V    |
| Working Peak Reverse Voltage                | V <sub>RWM</sub>    |             |      |
| DC Blocking Voltage                         | V <sub>R</sub>      |             |      |
| RMS Reverse Voltage                         | V <sub>R(RMS)</sub> | 28          | V    |
| Forward Continuous Current                  | I <sub>FM</sub>     | 200         | mA   |
| Forward Surge Current @ t = 1.0s            | I <sub>FSM</sub>    | 600         | mA   |
| Power Dissipation                           | P <sub>d</sub>      | 200         | mW   |
| Thermal Resistance, Junction to Ambient Air | R <sub>θJA</sub>    | 625         | °C/W |
| Operating Temperature Range                 | T <sub>j</sub>      | -55 to +125 | °C   |
| Storage Temperature Range                   | T <sub>STG</sub>    | -65 to +150 | °C   |

#### ■ Electrical Characteristics Ta = 25°C

| Parameter                 | Symbol             | Testconditions                                                                                          | Min | Typ | Max         | Unit |
|---------------------------|--------------------|---------------------------------------------------------------------------------------------------------|-----|-----|-------------|------|
| Reverse Breakdown Voltage | V <sub>(BR)R</sub> | I <sub>R</sub> =10 μA                                                                                   | 40  |     |             | V    |
| Forward Voltage           | V <sub>F</sub>     | I <sub>F</sub> =1.0mA, t <sub>p</sub> <300 μs<br>I <sub>F</sub> =40mA, t <sub>p</sub> <300 μs           |     |     | 380<br>1000 | mV   |
| Reverse Leakage           | I <sub>R</sub>     | V <sub>R</sub> =30V                                                                                     |     |     | 200         | nA   |
| Junction Capacitance      | C <sub>j</sub>     | V <sub>R</sub> =0V, f=1.0MHz                                                                            |     |     | 5.0         | pF   |
| Reverse Recover Time      | T <sub>rr</sub>    | I <sub>F</sub> = I <sub>R</sub> = 10mA, I <sub>rr</sub> = 0.1 X I <sub>R</sub> , R <sub>L</sub> = 100 Ω |     |     | 5.0         | ns   |

#### ■ Marking

| NO.     | KAS40W | KAS40-04W | KAS40-05W | KAS40-06W |
|---------|--------|-----------|-----------|-----------|
| Marking | K43    | K44       | K45       | K46       |