

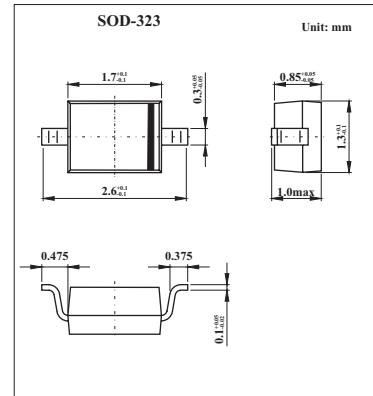


# Surface Mount Schottky Barrier Rectifier

## K0530WS(B0530WS)

### ■ Features

- Very Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- High Conductance



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

| Parameter   | Symbol                            | Rating      | Unit |
|---|-----------------------------------|-------------|------|
| Peak repetitive reverse voltage   | V <sub>RRM</sub>                  |             |      |
| Working peak reverse voltage  | V <sub>RWM</sub>                  | 30          | V    |
| DC blocking voltage   | V <sub>R</sub>                    |             |      |
| RMS reverse voltage   | V <sub>R(RMS)</sub>               | 21          | V    |
| Average rectified output current  | I <sub>O</sub>                    | 0.5         | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms single half sine-wave superimposed on rated load<br>(JEDEC Method) | I <sub>FSM</sub>                  | 2           | A    |
| Power dissipation *   | P <sub>D</sub>                    | 235         | mW   |
| Typical Thermal Resistance Junction to Ambient *  | R <sub>θJA</sub>                  | 426         | °C/W |
| Operating and storage temperature range   | T <sub>j</sub> , T <sub>stg</sub> | -40 to +125 | °C   |

\* Valid provided that terminals are maintained at ambient temperature.

### ■ Electrical Characteristics Ta = 25°C

| Parameter                 | Symbol             | Testconditons  | Min | Typ  | Max              | Unit |
|---------------------------|--------------------|--|-----|------|------------------|------|
| Reverse Breakdown Voltage | V <sub>(BR)R</sub> | I <sub>R</sub> = 500 μA  | 30  |      |                  | V    |
| Forward voltage           | V <sub>F</sub>     | I <sub>F</sub> = 0.1A  |     |      | 0.36             | V    |
|                           |                    | I <sub>F</sub> = 0.5A  |     | 0.41 | 0.45             |      |
| Leakage current           | I <sub>R</sub>     | V <sub>R</sub> = 15V<br>V <sub>R</sub> = 20V<br>V <sub>R</sub> = 30V |     |      | 80<br>100<br>500 | μ A  |
| Junction Capacitance      | C <sub>J</sub>     | V <sub>R</sub> = 0, f = 1.0MHz                                       |     | 60   |                  | pF   |

### ■ Marking

|         |    |
|---------|----|
| Marking | SE |
|---------|----|