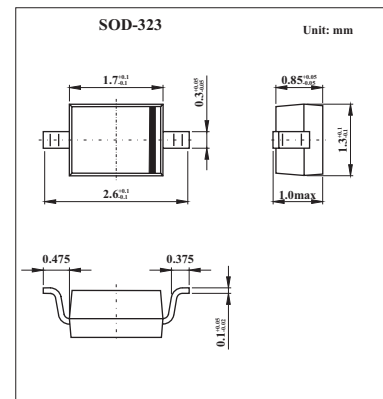


## Silicon Schottky Diode

## BAT14-03W

## ■ Features

- DBS mixer application to 12GHz
- Medium barrier type
- Low capacitance

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

| Parameter                       | Symbol     | Value       | Unit |
|---------------------------------|------------|-------------|------|
| Diode reverse voltage           | $V_R$      | 4           | V    |
| Forward current                 | $I_F$      | 90          | mA   |
| Operating temperature range     | $T_{op}$   | -55 to +125 | °C   |
| Storage temperature             | $T_{stg}$  | -55 to +150 |      |
| Total power dissipation         | $P_{tot}$  | 100         | mW   |
| Junction ambient <sup>(1)</sup> | $R_{thJA}$ | $\leq 450$  | °C   |
| Junction-soldering point        | $R_{thJS}$ | $\leq 690$  | K/W  |

Note:

1. Package mounted on an epoxy pcb 40 mm × 40 mm × 15 mm/1cm<sup>2</sup> Cu.

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

| Parameter                       | Symbol                              | Min        | Typ  | Max  | Unit |          |
|---------------------------------|-------------------------------------|------------|------|------|------|----------|
| Breakdown Voltage               | $I_{(BR)} = 5 \mu\text{A}$          | $V_{(BR)}$ | 4    |      | V    |          |
| Forward voltage                 | $I_F = 1 \text{ mA}$                | $V_F$      | 0.36 | 0.43 | 0.52 | V        |
|                                 | $I_F = 10 \text{ mA}$               |            | 0.48 | 0.55 | 0.66 |          |
| Diode capacitance               | $V_R = 0; f = 1 \text{ MHz}$        | $C_T$      |      | 0.22 | 0.35 | pF       |
| Differential forward resistance | $I_F = 10 \text{ mA}/50 \text{ mA}$ | $R_F$      |      | 5.5  |      | $\Omega$ |

## ■ Marking

|         |   |
|---------|---|
| Marking | O |
|---------|---|