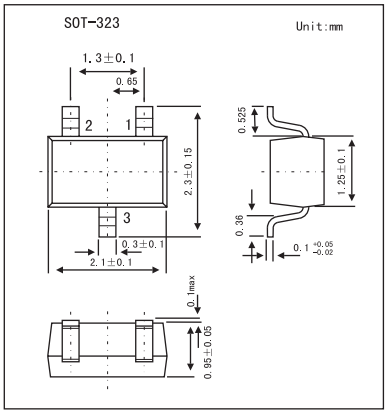
# Schottky barrier (double) diodes

## BAT854W;BAT854AW
## BAT854CW;BAT854SW




## Features

- Very low forward voltage
- Very low reverse current
- Guard ring protected
- Very small SMD package.

## Absolute Maximum Ratings Ta = 25℃

| Parameter | Symbol | Conditions | Min | Max | Unit |
|---|---|---|---|---|---|
| Continuous reverse voltage | $V_R$ | | | 40 | V |
| Continuous forward current | $I_F$ | | | 200 | mA |
| Repetitive peak forward current | $I_{FRM}$ | tp ⩽ 1 s; d ⩽ 0.5 | | 300 | mA |
| Non-repetitive peak forward current | $I_{FSM}$ | t = 8.3 ms half sinewave;JEDEC method | | 1 | A |
| Storage temperature | $T_{stg}$ | | -65 | +150 | ℃ |
| Junction temperature | $T_j$ | | | 150 | ℃ |
| Operating ambient temperature | $T_{amb}$ | | -65 | +150 | ℃ |
| Thermal resistance from junction to ambient | $R_{th\ j\text{-}a}$ | | | 625 | K/W |

## Electrical Characteristics Ta = 25℃

| Parameter | Symbol | Conditions | Typ | Max | Unit |
|---|---|---|---|---|---|
| Forward voltage | $V_F$ | $I_F$ = 0.1 mA | 200 | | mV |
| | | $I_F$ = 1 mA | 260 | | |
| | | $I_F$ = 10 mA | 340 | | |
| | | $I_F$ = 30 mA | | 420 | |
| | | $I_F$ = 100 mA | | 550 | |
| Continuous reverse current | $I_R$ | $V_R$ = 25 V; Note 1 | | 0.5 | μA |
| Diode capacitance | $C_d$ | f = 1 MHz; $V_R$ = 1 V | | 20 | pF |

Note

1. Pulse test: $t_p$ < 300 μs; δ ⩽ 0.02.

## Marking

| Type | BTA854W | BAT854AW | BAT854CW | BAT854SW |
|---|---|---|---|---|
| Marking | 81 | 82 | 83 | 84 |