

Silicon Schottky Diode

BAT68-04W, BAT68-05W, BAT68-06W

■ Features

- For mixer applications in VHF/UHF range
- For high-speed switching application

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

| Parameter | Symbol | Value | Unit |
|------------------------------------|------------|-------------|------------------|
| Diode reverse voltage | V_R | 8 | V |
| Forward current | I_F | 130 | mA |
| Total power dissipation | P_{tot} | 150 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |
| Junction - soldering point(Note 1) | R_{thJS} | ≤ 390 | K/W |

Note

1.For calculation of R_{thJA} please refer to Application Note Thermal Resistance

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

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|---------------------------------|------------|---|-----|-----|-----|---------------|
| Breakdown voltage | $V_{(BR)}$ | $I_{(BR)} = 10 \mu\text{A}$ | 8 | | | V |
| Reverse current | I_R | $V_R = 1\text{V}$ | | | 0.1 | μA |
| | | $V_R = 1\text{V}, T_A = 60^\circ\text{C}$ | | | 1.2 | |
| Forward voltage | V_F | $I_F = 1\text{mA}$ | | 318 | 340 | mV |
| | | $I_F = 10\text{mA}$ | 340 | 390 | 500 | |
| Diode capacitance | C_T | $V_R = 0, f = 1\text{MHz}$ | | | 1 | pF |
| Differential forward resistance | R_F | $I_F = 5\text{mA}, f = 10\text{KHz}$ | | | 10 | Ω |

■ Marking

| Type | BAT68-04W | BAT68-05W | BAT68-06W |
|---------|-----------|-----------|-----------|
| Marking | 84s | 85s | 86s |

