

## Schottky barrier (double) diodes

## BAT754 series

## ■ Features

- Ultra high switching speed
- Guard ring protected
- Small plastic SMD package
- Low diode capacitance.

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

| Parameter                           | Symbol    | Conditions   | Min | Max  | Unit             |
|-------------------------------------|-----------|--|-----|------|------------------|
| Continuous reverse voltage          | $V_R$     |  |     | 30   | V                |
| Continuous forward current          | $I_F$     |  |     | 200  | mA               |
| Repetitive peak forward current     | $I_{FRM}$ | $t_p < 1 \text{ s}; \delta < 0.5$                  |     | 300  | mA               |
| Non-repetitive peak forward current | $I_{FSM}$ | $t_p = 8.3 \text{ ms}$ half sinewave; JEDEC method |     | 600  | mA               |
| Storage temperature                 | $T_{stg}$ |  | -65 | +150 | $^\circ\text{C}$ |
| Junction temperature                | $T_j$     |  |     | 125  | $^\circ\text{C}$ |
| Operating ambient temperature       | $T_{amb}$ |  | -65 | +125 | $^\circ\text{C}$ |

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

| Parameter         | Symbol | Conditions                                | Min | Max | Unit          |
|-------------------|--------|---|-----|-----|---------------|
| Forward voltage   | $V_F$  | $I_F = 0.1 \text{ mA}$                    |     | 200 | mV            |
|                   |        | $I_F = 1 \text{ mA}$                      |     | 260 | mV            |
|                   |        | $I_F = 10 \text{ mA}$                     |     | 340 | mV            |
|                   |        | $I_F = 30 \text{ mA}$                     |     | 420 | mV            |
|                   |        | $I_F = 100 \text{ mA}$                    | 600 |     | mV            |
| Reverse current   | $I_R$  | $V_R = 25 \text{ V}$ ; Note 1             |     | 2   | $\mu\text{A}$ |
| Diode capacitance | $C_d$  | $f = 1 \text{ MHz}$ ; $V_R = 1 \text{ V}$ |     | 10  | pF            |

Note

1. Pulse test:  $t_p < 300 \mu\text{s}$ ;  $\delta \leq 0.02$ .

## ■ Marking

| Type    | BAT754 | BAT754A | BAT754C | BAT754S |
|---------|--------|---------|---------|---------|
| Marking | 2K     | 2L      | 2M      | 2N      |