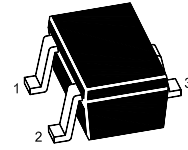
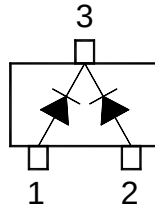


# BAT378W

## Silicon Epitaxial Planar Schottky Barrier Diode



SOT-323 Plastic Package

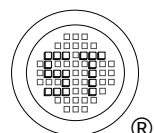
Marking Code: **B7**

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

| Parameter                     | Symbol    | Value       | Unit             |
|-------------------------------|-----------|-------------|------------------|
| Maximum Peak Reverse Voltage  | $V_{RM}$  | 15          | V                |
| Reverse Voltage               | $V_R$     | 10          | V                |
| Maximum Peak Forward Current  | $I_{FM}$  | 200         | mA               |
| Surge Forward Current (10 ms) | $I_{FSM}$ | 1           | A                |
| Average Forward Current       | $I_O$     | 100         | mA               |
| Power Dissipation             | $P_{tot}$ | 100         | mW               |
| Junction Temperature          | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage Temperature Range     | $T_{stg}$ | -55 to +125 | $^\circ\text{C}$ |
| Operating Temperature Range   | $T_{opr}$ | -40 to +100 | $^\circ\text{C}$ |

### Characteristics at $T_a = 25^\circ\text{C}$

| Parameter                                                             | Symbol | Min.   | Typ.   | Max.       | Unit          |
|-----------------------------------------------------------------------|--------|--------|--------|------------|---------------|
| Forward Voltage<br>at $I_F = 5\text{ mA}$<br>at $I_F = 100\text{ mA}$ | $V_F$  | -<br>- | -<br>- | 0.3<br>0.5 | V             |
| Reverse Current<br>at $V_R = 10\text{ V}$                             | $I_R$  | -      | -      | 20         | $\mu\text{A}$ |
| Total Capacitance<br>at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$       | $C_T$  | -      | 20     | 40         | pF            |



Dated : 27/02/2006

