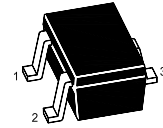


# BAS40W / -04W / -05W / -06W

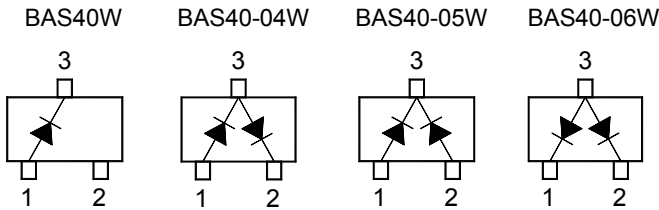
## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### Features

- Low forward voltage
- Fast switching



SOT-323 Plastic Package



|           |                         |
|-----------|-------------------------|
| BAS40W    | Marking Code: <b>43</b> |
| BAS40-04W | Marking Code: <b>44</b> |
| BAS40-05W | Marking Code: <b>45</b> |
| BAS40-06W | Marking Code: <b>46</b> |

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

| Parameter                                         | Symbol    | Value         | Unit             |
|---------------------------------------------------|-----------|---------------|------------------|
| Repetitive Peak Reverse Voltage                   | $V_{RRM}$ | 40            | V                |
| DC Blocking Voltage                               | $V_R$     | 40            | V                |
| Forward Continuous Current                        | $I_F$     | 200           | mA               |
| Peak Forward Surge Current (at $t_p \leq 8.3$ ms) | $I_{FSM}$ | 600           | mA               |
| Power Dissipation                                 | $P_d$     | 200           | mW               |
| Junction Temperature                              | $T_J$     | 150           | $^\circ\text{C}$ |
| Storage Temperature Range                         | $T_{Stg}$ | - 65 to + 150 | $^\circ\text{C}$ |

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

| Parameter                                                           | Symbol      | Min. | Max. | Unit |
|---------------------------------------------------------------------|-------------|------|------|------|
| Forward Voltage<br>at $I_F = 1$ mA                                  | $V_F$       | -    | 0.38 | V    |
| at $I_F = 40$ mA                                                    | $V_F$       | -    | 1    | V    |
| Reverse Breakdown Voltage<br>at $I_R = 10$ $\mu\text{A}$            | $V_{(BR)R}$ | 40   | -    | V    |
| Reverse Current<br>at $V_R = 30$ V                                  | $I_R$       | -    | 200  | nA   |
| Total Capacitance<br>at $V_R = 0$ V, $f = 1$ MHz                    | $C_T$       | -    | 5    | pF   |
| Reverse Recovery Time<br>at $I_F = I_R = 10$ mA, $I_{rr} = 0.1 I_R$ | $t_{rr}$    | -    | 5    | ns   |

