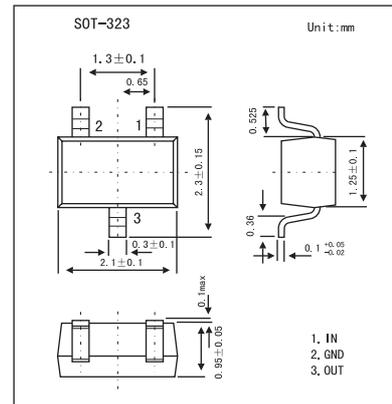


Schottky barrier (double) diodes

1PS70SB10; 1PS70SB14
1PS70SB15; 1PS70SB16

■ Features

- Low forward voltage
- Guard ring protected
- Very small plastic SMD package

■ 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} | $t_p \leq 1\text{s}, \delta \leq 0.5$ | | 300 | mA |
| Non-repetitive peak forward current | I_{FSM} | $t_p < 10\text{ms}$ | | 600 | mA |
| Total power dissipation (per package) | P_{tot} | $T_{amb} < 25^\circ\text{C}$ | | 200 | mW |
| Storage temperature | T_{stg} | | -65 | +150 | $^\circ\text{C}$ |
| Junction temperature | T_j | | | 125 | $^\circ\text{C}$ |
| Operating ambient temperature | T_{amb} | | -65 | +125 | $^\circ\text{C}$ |
| thermal resistance from junction to ambient | $R_{th\ j-a}$ | | | 625 | K/W |

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

| Parameter | Symbol | Conditions | Min | Max | Unit |
|----------------------------|--------|---------------------------------------|-----|-----|---------------|
| Continuous forward voltage | V_F | $I_F = 0.1\text{mA}$ | | 240 | mV |
| | | $I_F = 1\text{mA}$ | | 320 | mV |
| | | $I_F = 10\text{mA}$ | | 400 | mV |
| | | $I_F = 30\text{mA}$ | | 500 | mV |
| | | $I_F = 100\text{mA}$ | | 800 | mV |
| Reverse current | I_R | $V_R = 25\text{V}$, Note 1 | 2 | 15 | μA |
| Diode capacitance | C_d | $V_R = 0\text{V}$; $f = 1\text{MHz}$ | 10 | 50 | pF |

Note

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

■ Marking

| Type | 1PS70SB10 | 1PS70SB14 | 1PS70SB15 | 1PS70SB16 |
|---------|-----------|-----------|-----------|-----------|
| Marking | 7*0 | 7*4 | 7*5 | 7*6 |