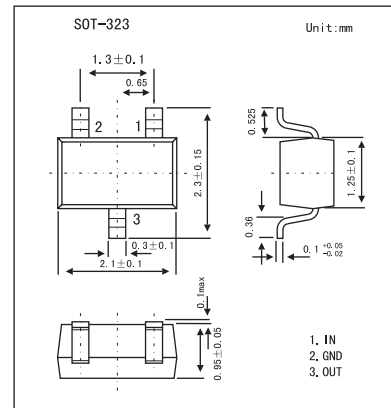


## Schottky barrier (double) diodes

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  | $\mu\text{ A}$ |
| 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       |