

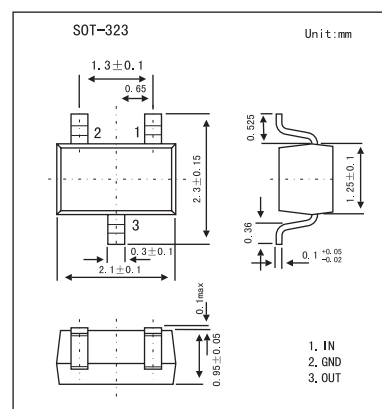
Schottky barrier (double) diodes

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}	$T_{a\text{ mb}} < 25^\circ\text{C}$		200	mW
Storage temperature	T_{stg}		-65	+150	$^\circ\text{C}$
Junction temperature	T_j			125	$^\circ\text{C}$
Operating ambient temperature	$T_{a\text{ mb}}$		-65	+125	$^\circ\text{C}$
thermal resistance from junction to ambient	$R_{th\text{ j-a}}$			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: $t_p < 300\text{ }\mu\text{s}$; $\delta \leq 0.02$.

■ Marking

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