

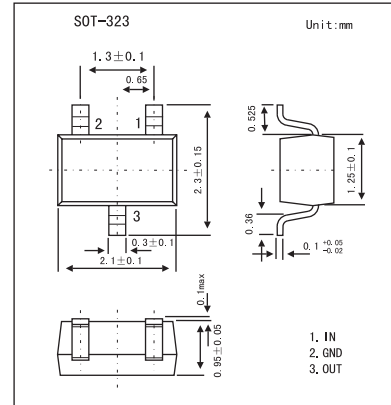
Schottky barrier (double) diodes

1PS70SB40;1PS70SB44

1PS70SB45;1PS70SB46

■ Features

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

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Max	Unit
Continuous reverse voltage	V_R			40	V
Continuous forward current	I_F			120	mA
Repetitive peak forward current	I_{FRM}	$t_p \leq 1\text{s}, \delta \leq 0.5$		120	mA
Non-repetitive peak forward current	I_{FSM}	$t_p < 10\text{ ms}$		200	mA
Storage temperature	T_{stg}		-65	+150	$^\circ\text{C}$
Junction temperature	T_j			125	$^\circ\text{C}$
Operating ambient temperature	T_{amb}		-65	+125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Max	Unit
Continuous forward voltage	V_F	$I_F = 1\text{ mA}$	380	mV
		$I_F = 10\text{ mA}$	500	mV
		$I_F = 40\text{ mA}$	1	V
Continuous reverse current	I_R	$V_R = 30\text{ V}, \text{ Note 1}$	1	$\mu\text{ A}$
		$V_R = 40\text{ V}, \text{ Note 1}$	10	
Charge carrier life time	τ	$I_F = 5\text{ mA}, \text{ Krakauer method}$	100	ps
Diode capacitance	C_d	$V_R = 0\text{ V}, f = 1\text{ MHz}$	5	pF

Note

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

■ Marking

Type	1PS70SB40	1PS70SB44	1PS70SB45	1PS70SB46
Marking	6*3	6*4	6*5	6*6