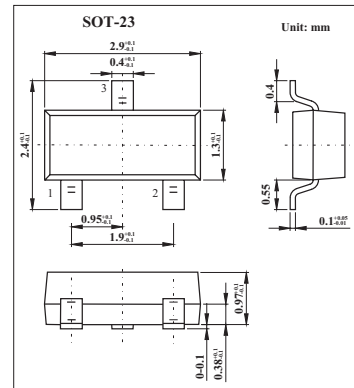


## Schottky Barrier (Double) Diodes

## 1PS59SB Series

## ■ Features

- Low forward voltage
- Guard ring protected
- Small 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	$I_{FSM}$	$t_p \leq 1\text{s}; \delta \leq 0.5$		300	mA
Non-repetitive peak forward current	$I_{FSM}$	$t_p \leq 10\text{ms}$		600	mA
Total power dissipation (per package)	$P_{tot}$	$T_{amb} \leq 25^\circ\text{C}$		250	mW
Storage temperature	$T_{stg}$		-65	+150	$^\circ\text{C}$
Junction temperature	$T_j$			125	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	Max	Unit
forward voltage	$V_F$	$I_F = 0.1\text{mA}$	240	mV
		$I_F = 1\text{mA}$	320	
		$I_F = 10\text{mA}$	400	
		$I_F = 30\text{mA}$	500	
		$I_F = 100\text{mA}$	800	
reverse current	$I_R$	$V_R = 25\text{V}$	2	$\mu\text{A}$
reverse recovery time	$t_{rr}$	when switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}; R_L = 100\ \Omega$ measured at $I_R = 1\text{mA}$	5	ns
diode capacitance	$C_d$	$f = 1\text{MHz}; V_R = 1\text{V}$	10	pF
thermal resistance from junction to ambient	$R_{th\ j-a}$		500	K/W

## ■ Marking

Type	1PS59SB10	1PS59SB14	1PS59SB15	1PS59SB16
Marking	10	14	15	16