

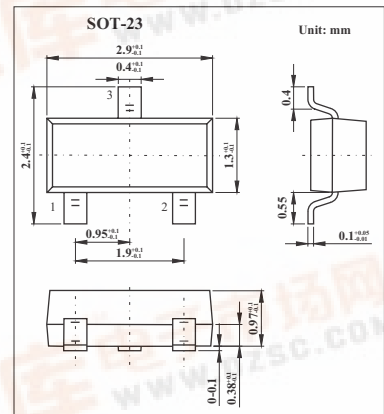
SMD Type Diodes

Schottky barrier diode

1PS59SB21

■ Features

- Ultra fast switching speed
- Low forward voltage
- Guard ring protected
- Small SMD package.



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

Parameter	Symbol	Min	Max	Unit
Continuous reverse voltage	V_R		40	V
Continuous forward current	I_F		200	mA
Non-repetitive peak forward current	I_{FSM}		1	A
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	Min	Max	Unit
forward voltage	V_F	$I_F = 10\text{ mA}$		300	mV
		$I_F = 100\text{ mA}$		420	
		$I_F = 200\text{ mA}$		550	
reverse current	I_R	$V_R = 35\text{ V}$		15	$\mu\text{ A}$
		$V_R = 35\text{ V}, T_j = 100\text{ }^\circ\text{C}$, note 1		3	mA
diode capacitance	C_d	$f = 1\text{ MHz}; V_R = 0\text{ V}$	40	50	pF
thermal resistance from junction to ambient	$R_{th\ j-a}$			500	K/W

Note

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

■ Marking

Marking	21
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