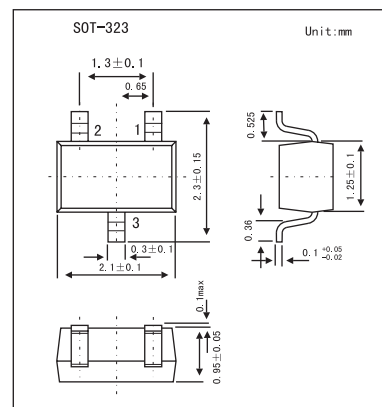


Schottky barrier(double) diodes

BAT54W Series

■ Features

- Low forward voltage
- Guard ring protected
- Very 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_{FRM}	$t_p \leq 1 \text{ s}; d \leq 0.5$		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	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	$V_R = 25 \text{ V}$; Note 1	2	μA
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

Note

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

■ Marking

Type	BAT54W	BAT54AW	BAT54CW	BAT54SW
Marking	L4	42	43	44