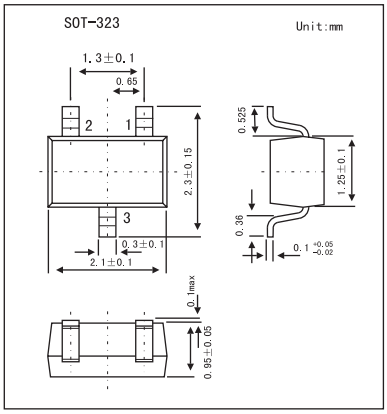
Schottky barrier(double) diodes

BAT54W Series



Features

- Low forward voltage
- Guard ring protected
- Very small SMD package.

Absolute Maximum Ratings Ta = 25℃

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}	tp ≤ 1 s; d ≤ 0.5		300	mA
Non-repetitive peak forward current	I_{FSM}	t_p < 10 ms		600	mA
Total power dissipation (per package)	P_{tot}	T_{amb} < 25℃		200	mW
Storage temperature	T_{stg}		-65	+150	℃
Junction temperature	T_j			125	℃
Operating ambient temperature	T_{amb}		-65	+125	℃
Thermal resistance from junction to ambient	$R_{th\ j\text{-}a}$			625	K/W

Electrical Characteristics Ta = 25℃

Parameter	Symbol	Conditions	Max	Unit
Forward voltage	V_F	I_F = 0.1 mA	240	mV
		I_F = 1 mA	320	
		I_F = 10 mA	400	
		I_F = 30 mA	500	
		I_F = 100 mA	800	
Reverse current	I_R	V_R = 25 V; Note 1	2	μA
Reverse recovery time	t_{rr}	when switched from I_F = 10 mA to I_R = 10 mA; R_L = 100 Ω measured at I_R = 1 mA	5	ns
Diode capacitance	C_d	f = 1 MHz; V_R = 1 V;	10	pF

Note

1. Pulse test: t_p < 300 μs; δ < 0.02.

Marking

Type	BAT54W	BAT54AW	BAT54CW	BAT54SW
Marking	L4	42	43	44