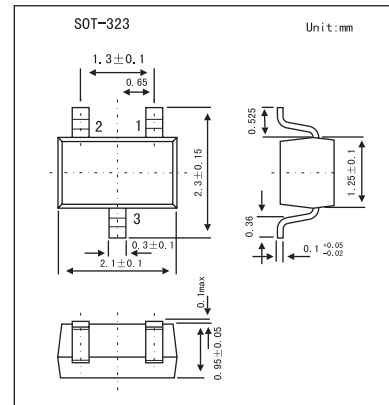


BAT54W Series

Features

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



Absolute Maximum Ratings Ta = 25°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 ≤ 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°C		200	mW
Storage temperature	T _{stg}		-65	+150	°C
Junction temperature	T _j			125	°C
Operating ambient temperature	T _{amb}		-65	+125	°C
Thermal resistance from junction to ambient	R _{th j-a}			625	K/W

Electrical Characteristics Ta = 25°C

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