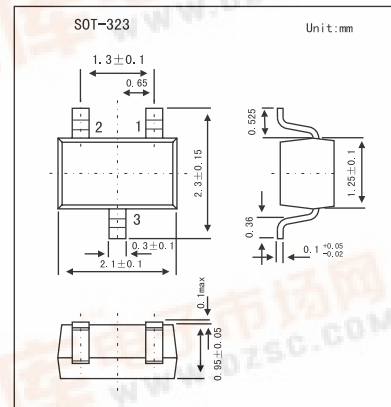


SMD Type Diodes

Schottky barrier(double) diodes
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	VR			30	V
Continuous forward current	IF			200	mA
Repetitive peak forward current	IFRM	tp ≤ 1 s; d ≤ 0.5		300	mA
Non-repetitive peak forward current	IFSM	tp < 10 ms		600	mA
Total power dissipation (per package)	Ptot	Tamb < 25°C		200	mW
Storage temperature	Tstg		-65	+150	°C
Junction temperature	Tj			125	°C
Operating ambient temperature	Tamb		-65	+125	°C
Thermal resistance from junction to ambient	Rthj-a			625	K/W

Electrical Characteristics Ta = 25°C

Parameter	Symbol	Conditions	Max	Unit
Forward voltage	VF	IF = 0.1 mA	240	mV
		IF = 1 mA	320	
		IF = 10 mA	400	
		IF = 30 mA	500	
		IF = 100 mA	800	
Reverse current	IR	VR = 25 V; Note 1	2	μA
Reverse recovery time	trr	when switched from IF = 10 mA to IR = 10 mA; RL = 100 Ω measured at IR = 1 mA	5	ns
Diode capacitance	Cd	f = 1 MHz; VR = 1 V;	10	pF

Note

1. Pulse test: tp < 300 μs; δ < 0.02.

Marking

Type	BAT54W	BAT54AW	BAT54CW	BAT54SW
Marking	L4	42	43	44

