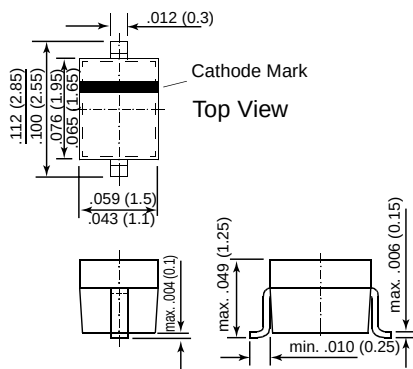


BAT54WS

SCHOTTKY DIODES

SOD-323

Dimensions in inches and (millimeters)

FEATURES

- ◆ These diodes feature very low turn-on voltage and fast switching.
- ◆ These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.

**MECHANICAL DATA**

Case: SOD-323 Plastic Package

Weight: approx. 0.004g

Marking Code: L4

MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	Volts
Forward Continuous Current at $T_{amb} = 25^{\circ}C$	I_F	200 ¹⁾	mA
Repetitive Peak Forward Current at $T_{amb} = 25^{\circ}C$	I_{FRM}	300 ¹⁾	mA
Surge Forward Current at $t_p < 1s$, $T_{amb} = 25^{\circ}C$	I_{FSM}	600 ¹⁾	mA
Power dissipation at $T_{amb} = 25^{\circ}C$	P_{tot}	150 ¹⁾	mW
Maximum Junction Temperature	T_j	150	°C
Storage Temperature Range	T_s	- 65 to +150	°C

NOTES:

(1) Valid provided that electrodes are kept at ambient temperature

BAT54WS

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage tested with 100μA Pulses	$V_{(BR)R}$	30	—	—	Volts
Forward Voltage Pulse Test $t_p < 300\mu s$, $\delta < 2\%$ at $I_F = 0.1mA$	V_F	—	—	240	mV
at $I_F = 1mA$	V_F	—	—	320	mV
at $I_F = 10mA$	V_F	—	—	400	mV
at $I_F = 30mA$	V_F	—	—	500	mV
at $I_F = 100mA$	V_F	—	—	1000	mV
Leakage Current Pulse Test $t_p < 300\mu s$, $\delta < 2\%$ at $V_R = 25 V$	I_R	—	—	2	μA
Capacitance at $V_F = 1 V$, $f = 1 MHz$	C_{tot}	—	—	10	pF
Reverse Recovery Time from $I_F = 10mA$ through $I_R = 10 mA$ to $I_R = 1mA$, $R_L = 100 \Omega$	t_{rr}	—	—	5	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	—	—	650 ¹⁾	°C/W

NOTES:

(1) Valid provided that electrodes are kept at ambient temperature