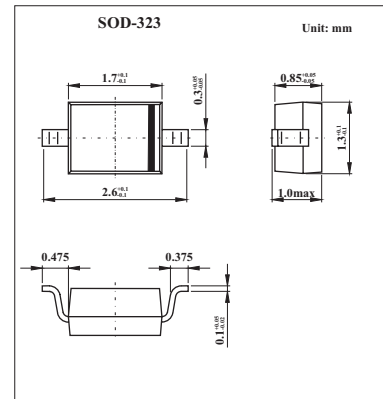


## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### BAT54WS

#### ■ Features

- Low Switching
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material - UL Recognition Flammability Classaification 94V-O



#### ■ Absolute Maximum Ratings Ta = 25°C

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	VRRM		
Working Peak Reverse Voltage	VRWM	30	V
DC Blocking Voltage	VR		
Forward Continuous Current (Note 1)	IF	200	mA
Rectified Peak Forward Current (Note 1)	IFRM	300	mA
Non-Repetitive Peak Forward Current @ t < 1.0s	IFSM	600	mA
Power Dissipation (Note)	Pd	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	RθJA	625	K/W
Operating and Storage Temperature Range	Tj, TSTG	-55 to +125	°C

Note:

1. Valid provided that terminals are kept at ambient temperature.

#### ■ Electrical Characteristics Ta = 25°C

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V(BR)R	@ I <sub>RS</sub> = 100 μA	30			V
Forward Voltage Drop (Note 2)	VF	@ IF = 1.0 mA			0.32	V
		@ IF = 100 mA			1.0	
Reverse Leakage Current (Note 2)	IR	@ VR = 25 V			2.0	μA
Junction Capacitance	Cj	@ VR = 1.0 V, f = 1.0 MHz			10	pF
Reverse Recovery Time	t <sub>rr</sub>	IF = 10 mA through IR = 100 mA to IRR = 1.0 mA, RL = 100 Ω			5.0	nS

Note:

2. t < 300 μs, duty cycle < 2%

#### ■ Marking

Marking	L4
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