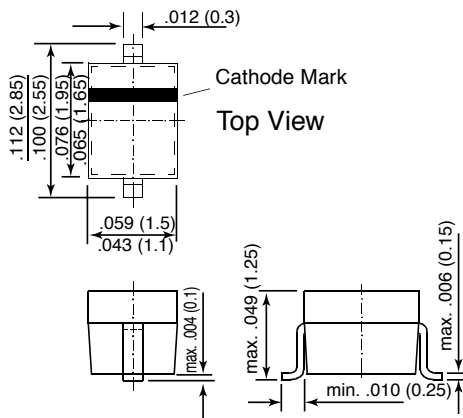


# SD107WS

## SCHOTTKY DIODES

### SOD-323



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Low turn-on voltage
- ◆ Fast switching
- ◆ Microminiature plastic package
- ◆ These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharge.
- ◆ Ideal for protection of MOS devices, steering, biasing, and coupling diodes for fast switching and low logic level applications.



### MECHANICAL DATA

**Case:** SOD-323 Plastic Package

**Weight:** approx. 0.004g

**Marking Code:** S1

### MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	$V_R$	30	Volts
Forward Current	$I_F$	100	mA
Forward Surge Current, $t_p = 10\text{ms}$	$I_{FSM}$	0.75	A
Power Dissipation $T_C = 25^\circ\text{C}$	$P_{tot}$	250 (NOTE 1)	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-65 to + 150	$^\circ\text{C}$

#### NOTES:

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

### ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$BV_R$	30	–	–	Volts
Leakage Current at $V_R = 25 \text{ V}$	$I_R$	–	–	1000	nA
Forward Voltage					
at $I_F = 2.0 \text{ mA}$	$V_F$	–	300	–	mV
at $I_F = 15 \text{ mA}$	$V_F$	–	360	–	mV
at $I_F = 50 \text{ mA}$	$V_F$	–	470	550	mV
at $I_F = 100\text{mA}$	$V_F$	–	580	800	mV
Junction Capacitance at $V_R = 10\text{V}$ , $f = 1.0\text{MHz}$	$C_{tot}$	–	–	Max 7.0	pF