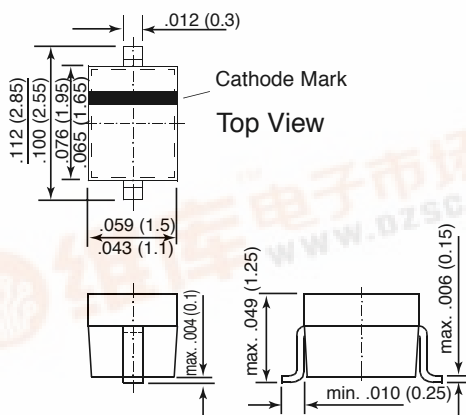


SD107WS

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	$^\circ\text{C/W}$
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 $I_R = 100\text{ }\mu\text{A}$	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