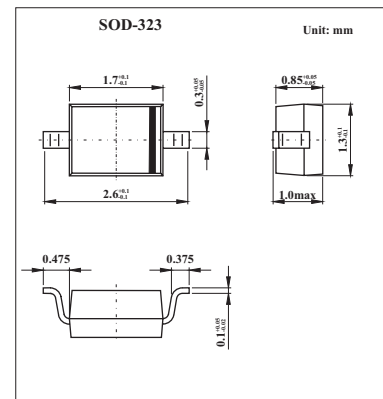


## SCHOTTKY DIODE

### SD107WS



#### ■ 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, blasing, and coupling diodes for fast switching and low logic level applications.

#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	30	Volts
Forward Current	$I_F$	100	mA
Forward Surge Current, $t_p = 10$ ms	$I_{FSM}$	0.75	A
Power Dissipation $T_c = 25^\circ\text{C}$	$P_{tot}$	250(Notes 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	$^\circ\text{C}$

Note:

1. Valid provided that electrodes are kept at ambient temperature

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Characteristic	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	$\mu\text{A}$
Forward Voltage	$V_F$		at $I_F = 2.1\text{mA}$	260	mV
			at $I_F = 15\text{mA}$	360	
			at $I_F = 100\text{mA}$	470	
			at $I_F = 200\text{mA}$	580	
Junction Capacitance at $V_R = 10\text{V}$ , $f = 1.0\text{MHz}$	$C_{tot}$			7.0	pF

#### ■ Marking

Marking	S1
---------	----