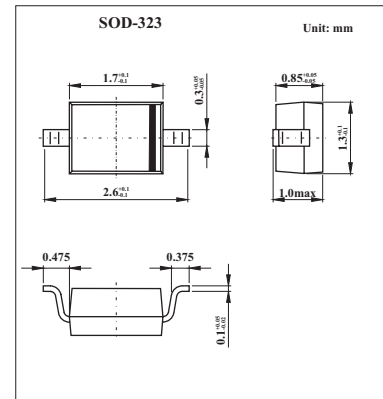


## SCHOTTKY DIODE

### SD106WS

#### ■ 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.



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

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	$V_R$	30	Volts
Forward Current	$I_F$	200	mA
Forward Surge Current, $t_p = 10\text{ ms}$	$I_{FSM}$	1.0	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 $V_R = 30\text{ V}$	$I_R$			5.0	$\mu\text{A}$
Forward Voltage	$V_F$	at $I_F = 2.1\text{ mA}$	260		mV
		at $I_F = 15\text{ mA}$	320		
		at $I_F = 100\text{ mA}$	420		
		at $I_F = 200\text{ mA}$	490	550	
Junction Capacitance at $V_R = 10\text{ V}$ , $f = 1.0\text{ MHz}$	$C_{tot}$			15	pF

#### ■ Marking

Marking	S2
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