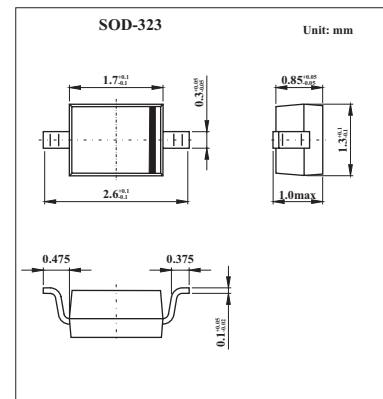


## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### SD101BWS

#### ■ Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Capacitance
- Ultra-small Surface Mount Package



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse voltage	V <sub>RRM</sub>		
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	V
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	15	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s	I <sub>FSM</sub>	50	mA
@ t = 10 μs		2.0	A
Power Dissipation (Note1)	P <sub>d</sub>	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R <sub>θJA</sub>	625	°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +125	°C

Note:

1. Part mounted on FR-4 PCB board with recommended pad layout.

## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### SD101BWS

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	$V_R = 10 \mu A$	50		V
Forward Voltage Drop (Note 2)	$V_{FM}$	$I_F = 1.0 \text{ mA}$		0.4	V
		$I_F = 15 \text{ mA}$		0.95	
Peak Reverse Leakage Current (Note 2)	$I_{RM}$	$V_R = 40 \text{ V}$		200	$\mu A$
Total Capacitance	$C_T$	$V_R = 0 \text{ V}, f = 1.0 \text{ MHz}$		2.1	pF
Reverse Recovery Time	$t_{rr}$	$I_F = I_R = 5.0 \text{ mA}$ $I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$		1.0	ns

Note:

- Short duration test pulse used to minimize self-heating effect.

#### ■ Marking

Marking	S2
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