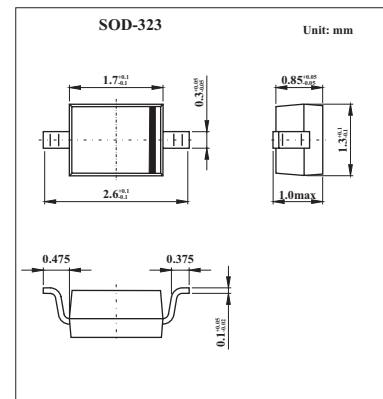


SURFACE MOUNT SCHOTTKY BARRIER DIODE

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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	50	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	35	V
Forward Continuous Current (Note 1)	I_{FM}	15	mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$	I_{FSM}	50	mA
@ $t = 10 \mu\text{s}$		2.0	A
Power Dissipation (Note1)	P_d	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125	$^\circ\text{C}$

Note:

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

SURFACE MOUNT SCHOTTKY BARRIER DIODE

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■ 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	μA
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:

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

■ Marking

Marking	S2
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