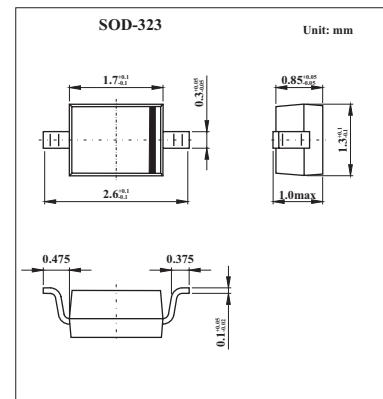


SURFACE MOUNT SCHOTTKY BARRIER DIODE

SD101AWS

■ 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 _{RRM}		
Working Peak Reverse Voltage	V _{RWM}	60	V
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	40	V
Forward Continuous Current (Note 1)	I _{FM}	15	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s	I _{FSM}	50	mA
@ t = 10 μs		2.0	A
Power Dissipation (Note1)	P _d	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +125	°C

Note:

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

SURFACE MOUNT SCHOTTKY BARRIER DIODE

SD101AWS

■ Electrical Characteristics Ta = 25°C

Characteristic	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	$V_R = 10 \mu A$	60		V
Forward Voltage Drop (Note 2)	V_{FM}	$I_F = 1.0 \text{ mA}$		0.41	V
		$I_F = 15 \text{ mA}$		1.00	
Peak Reverse Leakage Current (Note 2)	I_{RM}	$V_R = 50 \text{ V}$		200	μA
Total Capacitance	C_T	$V_R = 0 \text{ V}, f = 1.0 \text{ MHz}$		2.0	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	S1
---------	----