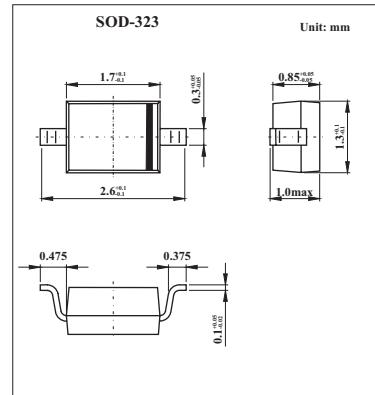


## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### SD101CWS

#### ■ 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>	40	V
DC Blocking Volatge	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	28	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	15	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s @ t = 10 μ s	I <sub>FSM</sub>	50 2.0	mA 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 PC borad with recommended pad layout.

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

Characteristic	Symbol	Test Condition	Min	Max	Unit
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	V <sub>R</sub> = 10 μ A	40		V
Forward Voltage Drop (Note 2)	V <sub>FM</sub>	I <sub>F</sub> = 1.0 mA		0.39	V
		I <sub>F</sub> = 15 mA		0.9	
Peak Reverse Leakage Current (Note 2)	I <sub>RM</sub>	V <sub>R</sub> = 30 V	200		μ A
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0 V, f = 1.0 MHz	2.2		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 5.0 mA I <sub>rr</sub> = 0.1 × I <sub>R</sub> , R <sub>L</sub> = 100 Ω		1.0	ns

Note:

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

#### ■ Marking

Marking	S3
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