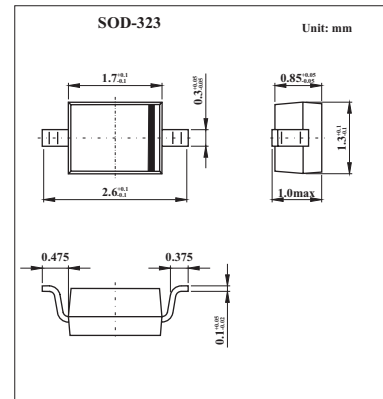


## SURFACE MOUNT SCHOTTKY BARRIER DIODE

## SD103CWS



### ■ 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>	20	V
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	V
Forward Continuous Current (Note 1)	I <sub>FM</sub>	350	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s	I <sub>FSM</sub>	1.5	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 board with recommended pad layout.

### ■ Electrical Characteristics Ta = 25°C

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 2)	V <sub>(BR)R</sub>	V <sub>R</sub> = 10 μA	20			V
Forward Voltage Drop (Note 2)	V <sub>FM</sub>	I <sub>F</sub> = 20 mA			0.37	V
		I <sub>F</sub> = 100 mA			0.6	
Peak Reverse Leakage Current (Note 2)	I <sub>RM</sub>	V <sub>R</sub> = 10 V			5.0	μA
Total Capacitance	C <sub>T</sub>	V <sub>R</sub> = 0 V, f = 1.0 MHz		50		pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 200 mA I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100 Ω		10		ns

Note:

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

### ■ Marking

Marking	S6
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