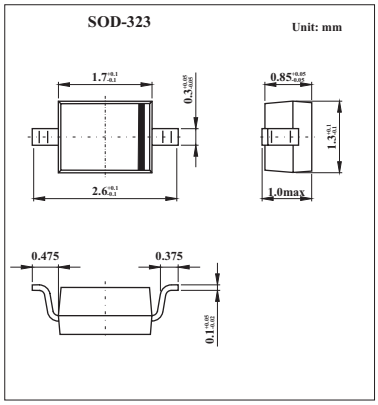
SURFACE MOUNT SCHOTTKY BARRIER DIODE

SD103BWS



■ 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℃

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse voltage Working Peak Reverse Voltage DC Blocking Volatge	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current (Note 1)	I_{FM}	350	mA
Non-Repetitive Peak Forward Surge Current @ t ⩽ 1.0s	I_{FSM}	1.5	A
Power Dissipation (Note1)	P_d	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	℃/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to+125	℃

Note:

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

■ Electrical Characteristics Ta = 25℃

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	V_R = 10 μA	30			V
Forward Voltage Drop (Note 2)	V_{FM}	I_F = 20 mA I_F = 100 mA			0.37 0.6	V
Peak Reverse Leakage Current (Note 2)	I_{RM}	V_R = 20 V			5.0	μA
Total Capacitance	C_T	V_R = 0 V, f = 1.0 MHz		50		pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 200 mA Irr = 0.1 x I_R, R_L = 100 Ω		10		ns

Note:

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

■ Marking

Marking	S5