SENSITRON

SEMICONDUCTOR

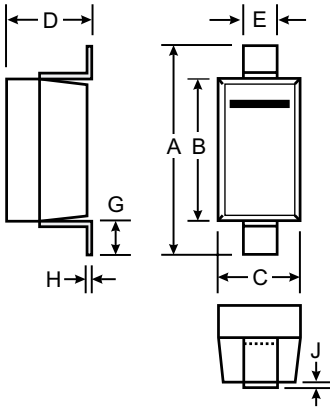
SD103AWS-G - SD103CWS-G

SCHOTTKY BARRIER SWITCHING DIODE

Data Sheet 3331, Rev. - ***Green Products***

Features

- Green Products in Compliance with the RoHS Directive
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- Ultra-Small Surface Mount Package



SOD-323				
Dim	**Min**	**Max**	**Min**	**Max**
A	2.30	2.70	0.091	0.106
B	1.75	1.95	0.069	0.077
C	1.15	1.35	0.045	0.053
D	0.25	0.35	0.010	0.014
E	0.05	0.15	0.002	0.006
G	0.70	0.95	0.028	0.037
H	0.30	—	0.012	—
	In mm		**In inch**	

Mechanical Data

- Case: SOD-323, Plastic
- Polarity: Cathode Band
- Leads: Solderable per MIL-STD-202, Method 208
- SD103AWS-G Marking: S4
- SD103BWS-G Marking: S5 or S4
- SD103CWS-G Marking: S6 or S5 or S4
- Weight: 0.004 grams (approx.)

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	SD103AWS-G	SD103BWS-G	SD103CWS-G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	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 (Note 1)	P_d	200			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625			°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125			°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic		Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	SD103AWS-G SD103BWS-G SD103CWS-G	$V_{(BR)R}$	40 30 20	—	—	V	I_R = 10μA I_R = 10μA I_R = 10μA
Forward Voltage Drop		V_{FM}	—	—	0.37 0.60	V	I_F = 20mA I_F = 200mA
Peak Reverse Current	SD103AWS-G SD103BWS-G SD103CWS-G	I_{RM}	—	—	5.0	μA	V_R = 30V V_R = 20V V_R = 10V
Junction Capacitance		C_j	—	50	—	pF	V_R = 0V, f = 1.0MHz
Reverse Recovery Time		t_{rr}	—	10	—	ns	I_F = I_R = 200mA, I_{rr} = 0.1 x I_R, R_L = 100Ω

Notes: 1. Valid provided that leads are kept at ambient temperature.
2. Test period <3000μs.

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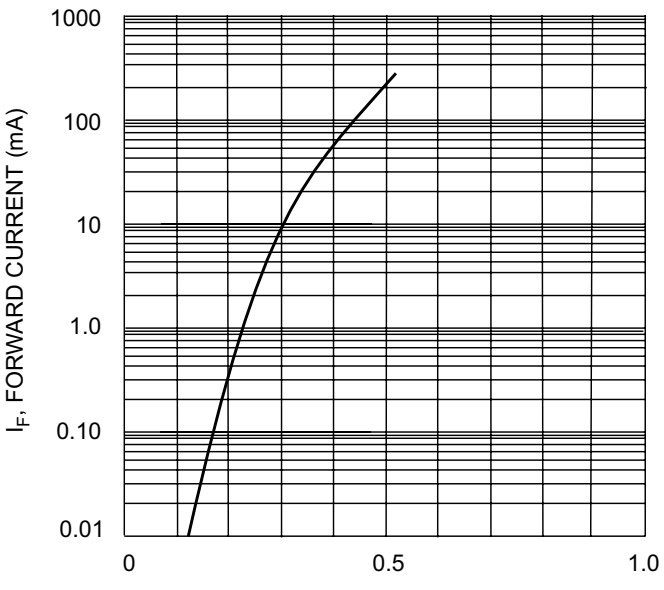

Fig. 1 Typical Forward Characteristics

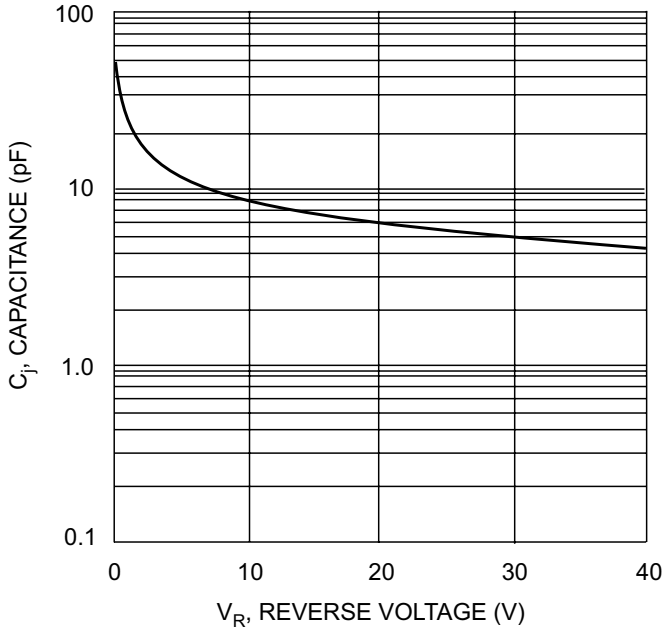

Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

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