

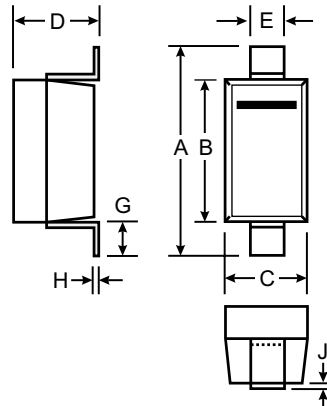
Data Sheet 2922, Rev. -

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- Ultra-Small Surface Mount Package

Mechanical Data

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



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.60	1.80
C	1.20	1.40
D	1.05 Typical	
E	0.25	0.35
G	0.20	0.40
H	0.10	0.15
J	0.05 Typical	
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Reverse Voltage	V _{RRM}				
Working Peak Reverse Voltage	V _{RWM}	40	30	20	V
DC Blocking Voltage	V _R				
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 _{θJA}		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)	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	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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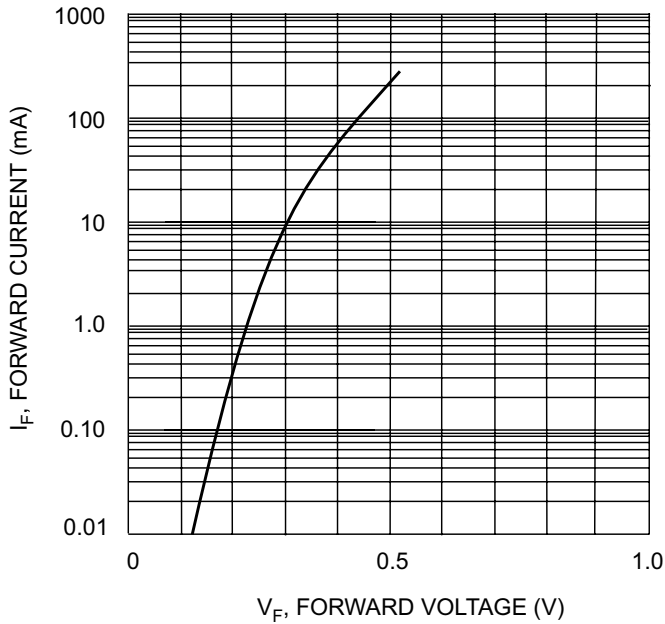


Fig. 1 Typical Forward Characteristics

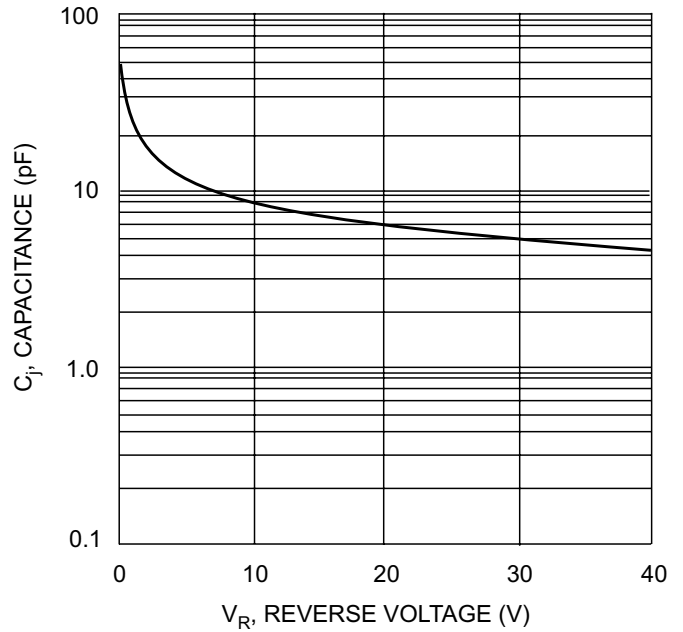


Fig. 2 Typ. Junction Capacitance vs Reverse Voltage

TECHNICAL DATA

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