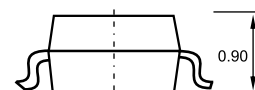
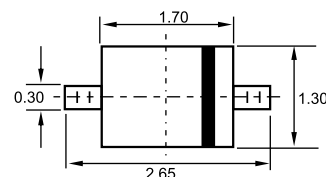



SOD-323


Dimensions in inches and (millimeters)

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
- ✧ Case material - UL Flammability Rating Classification 94V-0
- ✧ Polarity: Cathode Band
- ✧ Weight: 0.004 grams (approx.)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	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	I_{FM}	350			mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0s$	I_{FSM}	1.5			A
Power Dissipation	P_d	200			mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	625			°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125			°C

Electrical Characteristics

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	40 30 20	—	—	V	$I_R = 10\mu A$ $I_R = 10\mu A$ $I_R = 10\mu A$
Forward Voltage Drop (Note 1)	V_{FM}	—	—	0.37 0.60	V	$I_F = 20mA$ $I_F = 200mA$
Peak Reverse Current (Note 1)	I_{RM}	—	—	5.0	μA	$V_R = 30V$ $V_R = 20V$ $V_R = 10V$
Total Capacitance	C_T	—	50	—	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	t_{rr}	—	10	—	ns	$I_F = I_R = 200mA$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Notes: 1. Short duration test pulse used to minimize self-heating effect.

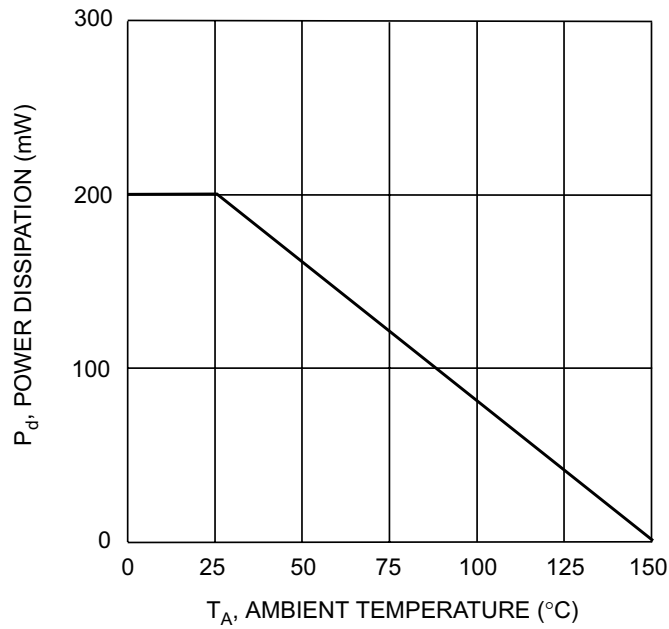


Fig. 1 Power Derating Curve

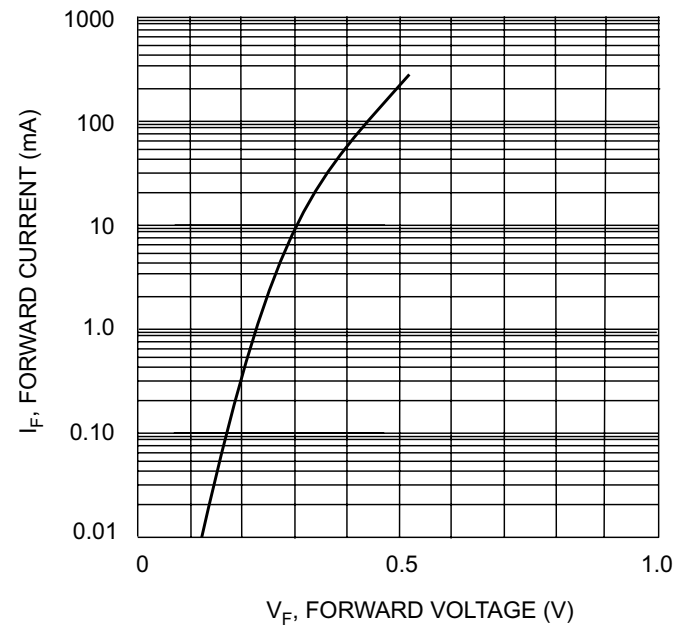


Fig. 2 Typical Forward Characteristics

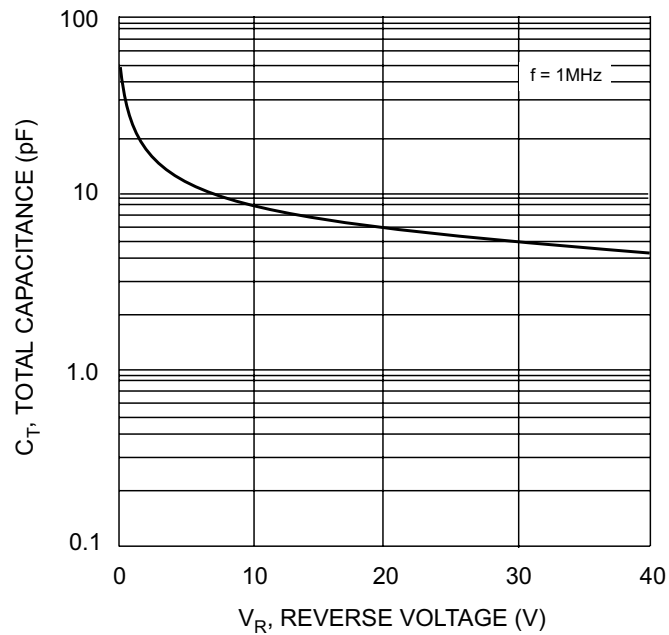


Fig. 3 Total Capacitance vs Reverse Voltage

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-323	3000/REEL	180000	44X44X22	9.00	8.00