

Maximum Ratings (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	40	30	20	V
Working Peak Reverse Voltage	V _{RWM}				
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 @ 8.3ms Half-Sine Waveform	I _{FSM}	1.5			A

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 6)	P _D	200	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	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 Conditions
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	40 30 20	—	—	V	I _R = 100μA I _R = 100μA I _R = 100μA
Forward Voltage Drop	V _F	—	—	0.37 0.60	V	I _F = 20mA I _F = 200mA
Peak Reverse Current (Note 6)	I _R	—	—	5.0	μA	V _R = 30V V _R = 20V V _R = 10V
Total Capacitance	C _T	—	35	—	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: 5. Device mounted on Alumina ceramic PC board, single-sided, 2oz copper pad area 25mm².
 6. Short duration test pulse used to minimize self-heating effect.

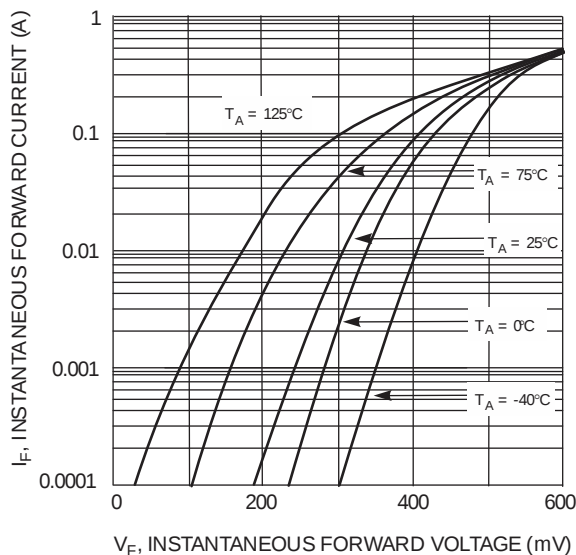


Fig. 1 Typical Forward Characteristics

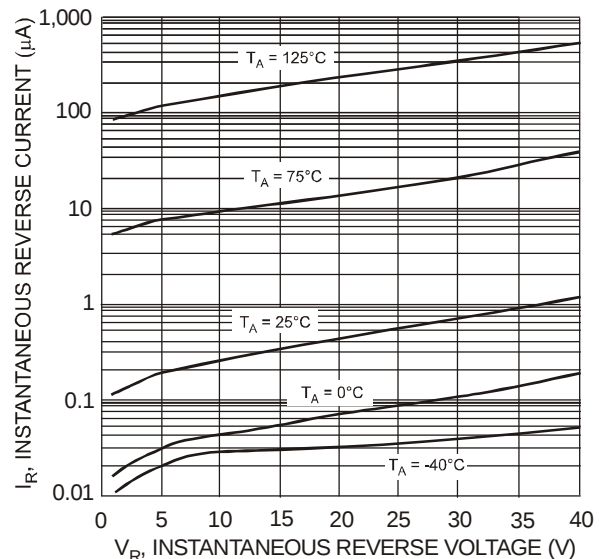
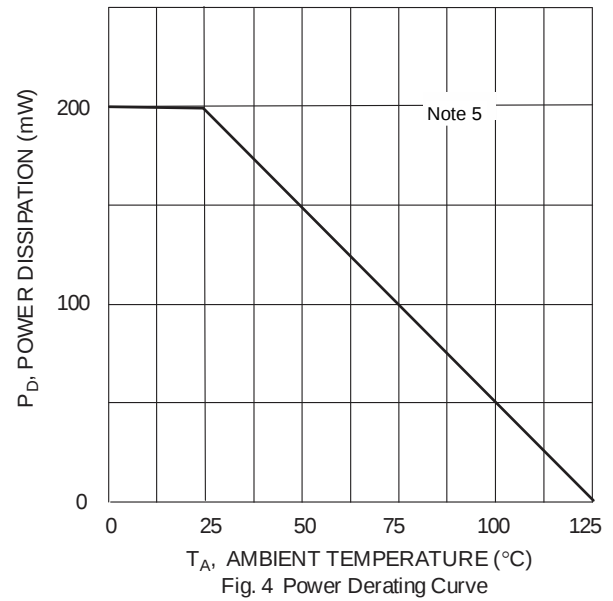
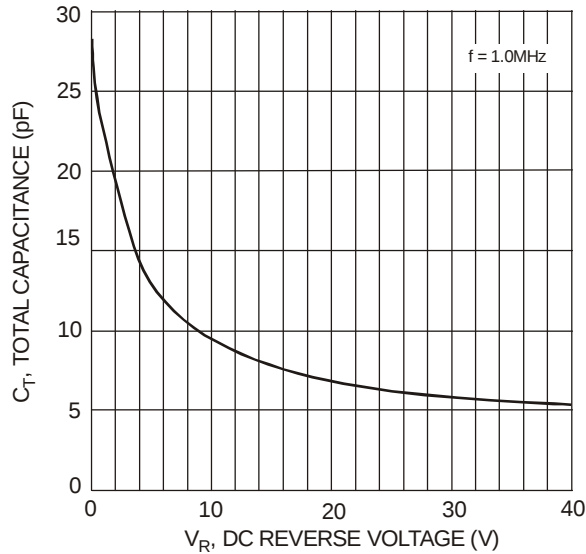


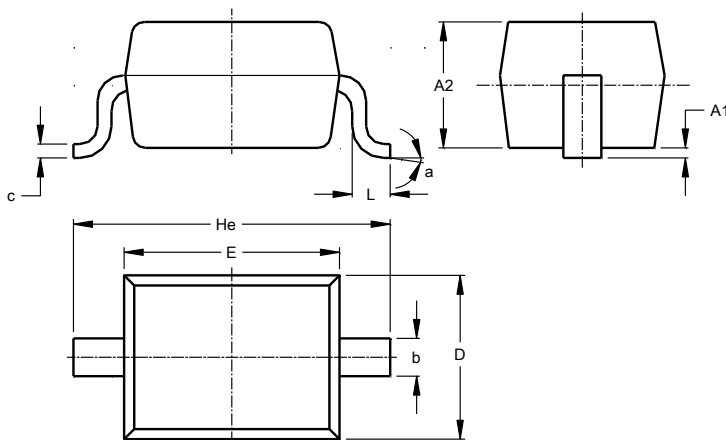
Fig. 2 Typical Reverse Characteristics



Package Outline Dimensions

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

SOD323

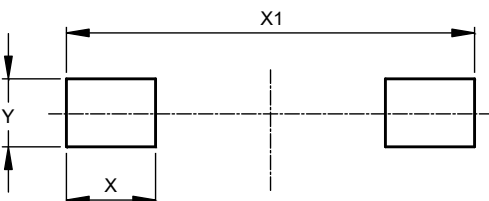


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Dim	Min	Max	Typ
A1	--	0.10	0.05
A2	1.00	1.10	1.05
b	0.25	0.35	0.30
c	0.10	0.15	0.11
D	1.20	1.40	1.30
E	1.60	1.80	1.70
He	2.30	2.70	2.50
L	0.20	0.40	0.30
a	0°	8°	--
All Dimensions in mm			

Suggested Pad Layout

Please see <http://www.diodes.com/package-outlines.html> for the latest version.

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Dimensions	Value (in mm)
X	0.590
X1	2.700
Y	0.450

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