

Maximum Ratings (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	SD103AWS	SD103BWS	SD103CWS	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 6)	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 6)	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	$^\circ\text{C}$

Electrical Characteristics (@ $T_A = +25^\circ\text{C}$, unless otherwise specified.)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Reverse Breakdown Voltage (Note 7)	$V_{(BR)R}$	40 30 20	—	—	V	$I_R = 100\mu\text{A}$ $I_R = 100\mu\text{A}$ $I_R = 100\mu\text{A}$
Forward Voltage Drop	V_F	—	—	0.37 0.60	V	$I_F = 20\text{mA}$ $I_F = 200\text{mA}$
Peak Reverse Current (Note 7)	I_R	—	—	5.0	μA	$V_R = 30\text{V}$ $V_R = 20\text{V}$ $V_R = 10\text{V}$
Total Capacitance	C_T	—	35	—	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	10	—	ns	$I_F = I_R = 200\text{mA}$, $t_{rr} = 0.1 \times I_R, R_L = 100\Omega$

Notes: 6. Device mounted on Alumina ceramic PC board, single-sided, 2oz copper pad area 25mm^2 .
 7. Short duration test pulse used to minimize self-heating effect.

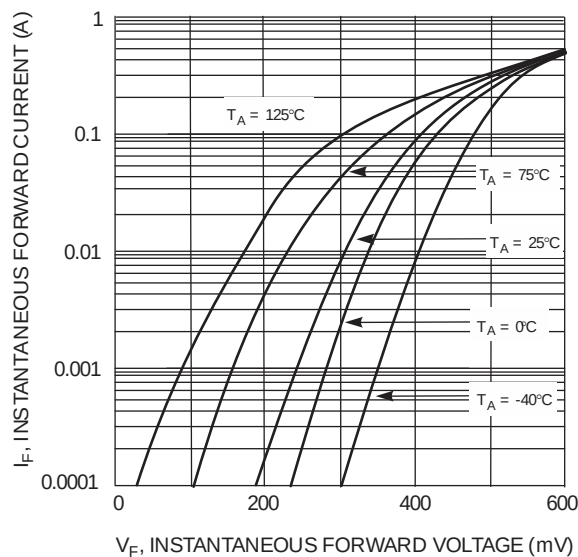


Fig. 1 Typical Forward Characteristics

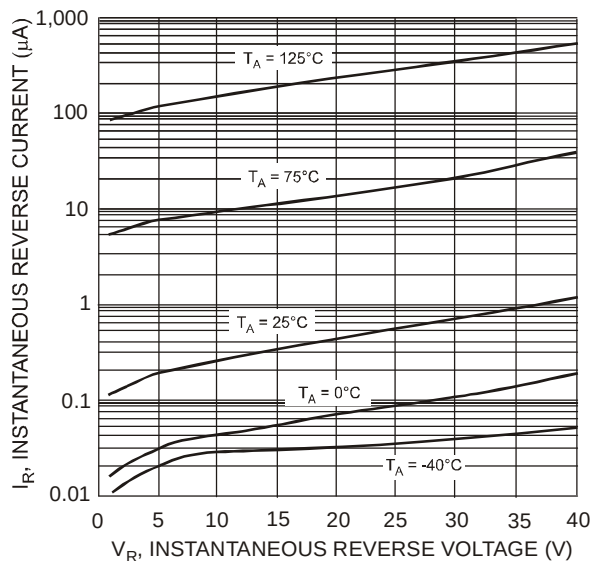
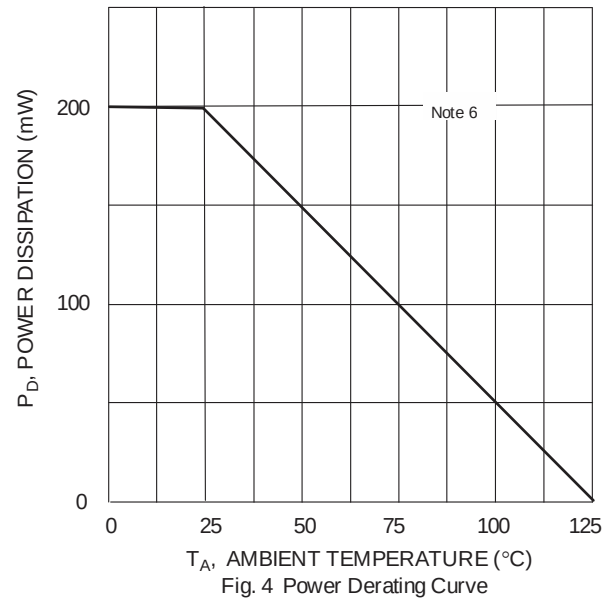
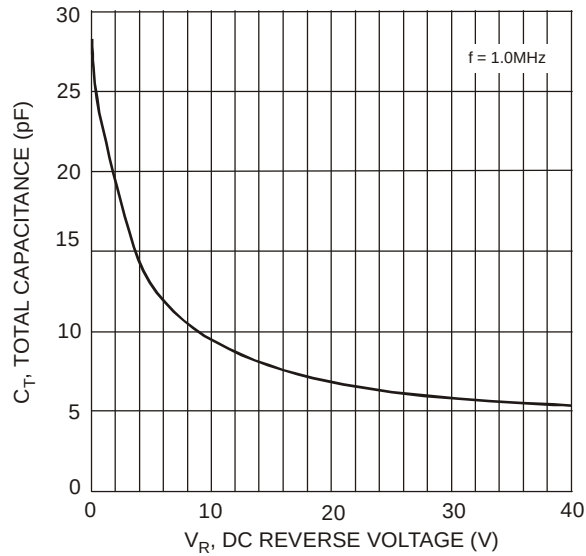
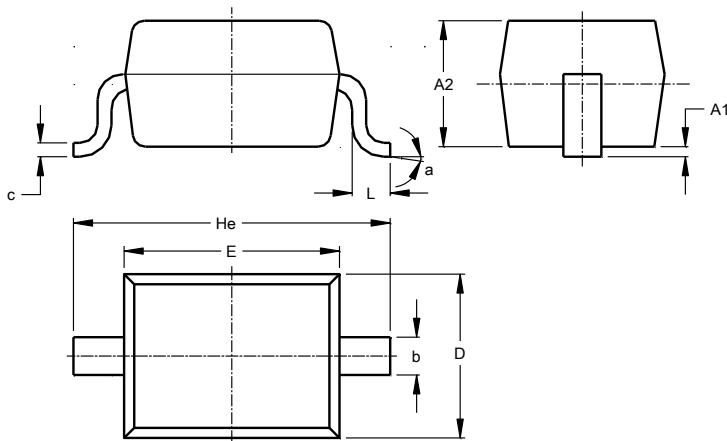


Fig. 2 Typical Reverse Characteristics



Package Outline Dimensions

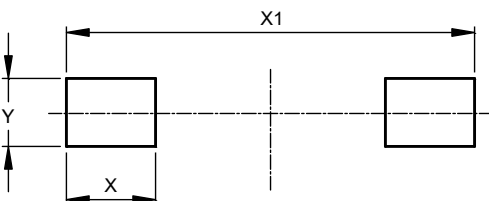
Please see <http://www.diodes.com/package-outlines.html> for the latest version.



SOD323			
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.



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

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