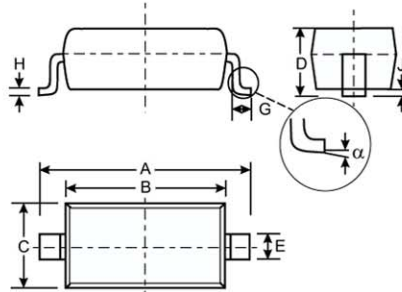


● Features

Low Forward Voltage Drop
Guard Ring Construction for Transient Protection
Negligible Reverse Recovery Time
Very Low Reverse Capacitance

● Mechanical Data

Case: SOD-123, Plastic
Case material - UL Flammability Rating Classification 94V-0
Moisture sensitivity: Level 1 per J-STD-020A
Polarity: Cathode Band
Leads: Solderable per MIL-STD-202, Method 208
Weight: 0.01 grams (approx.)
Ordering Information: See Page 2



SOD-123		
Dim	Min	Max
A	3.55	3.85
B	2.55	2.85
C	1.40	1.70
D	—	1.35
E	0.55 Typical	
G	0.25	—
H	0.11 Typical	
J	—	0.10
α	0°	8°
All Dimensions in mm		

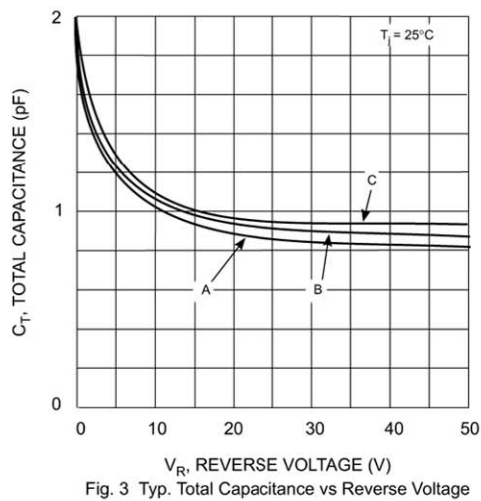
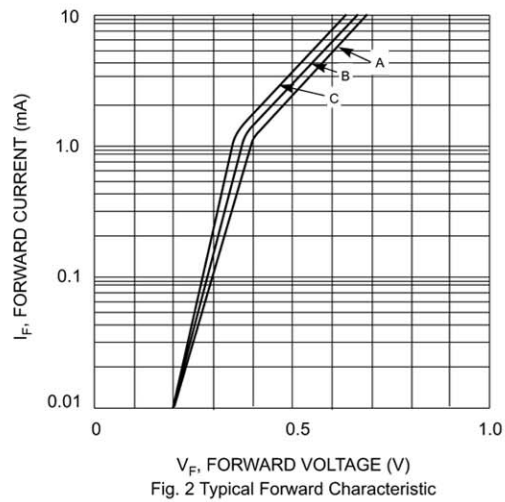
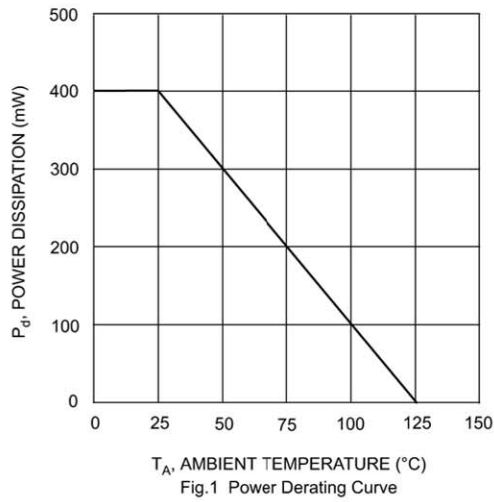
● Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SD101AW	SD101BW	SD101CW	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	50	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	35	28	V
Forward Continuous Current (Note 1)	I_{FM}	15			mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 1.0\text{s}$ @ $t = 10\mu\text{s}$	I_{FSM}		50 2.0		mA A
Power Dissipation (Note 1)	P_d		400		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$		300		$^\circ\text{C/W}$
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	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	60 50 40	—	V	$I_R = 10\mu\text{A}$ $I_R = 10\mu\text{A}$ $I_R = 10\mu\text{A}$
Forward Voltage Drop (Note 2)	V_{FM}	—	0.41 0.40 0.39 1.00 0.95 0.90	V	$I_F = 1.0\text{mA}$ $I_F = 1.0\text{mA}$ $I_F = 1.0\text{mA}$ $I_F = 15\text{mA}$ $I_F = 15\text{mA}$ $I_F = 15\text{mA}$
Peak Reverse Current (Note 2)	I_{RM}	—	200	nA	$V_R = 50\text{V}$ $V_R = 40\text{V}$ $V_R = 30\text{V}$
Total Capacitance	C_T	—	2.0 2.1 2.2	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	1.0	ns	$I_F = I_R = 5.0\text{mA}$, $t_{rr} = 0.1 \times I_R, R_L = 100\Omega$

- Notes: 1. Part mounted on FR-4 board with recommended pad layout.
2. Short duration test pulse used to minimize self-heating effect.



Ordering Information

Device	Packaging	Shipping
SD101AW	SOD-123	3000/Tape and Reel
SD101BW	SOD-123	3000/Tape and Reel
SD101CW	SOD-123	3000/Tape and Reel