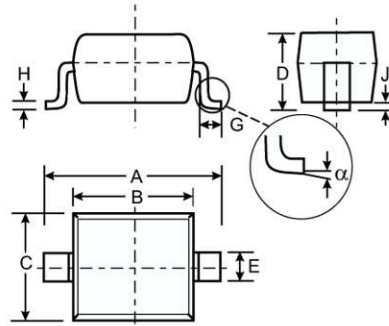


● Features

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

● Mechanical Data

- Case: SOD-323, 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: 0.004 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	
α	0°	8°
All Dimensions in mm		

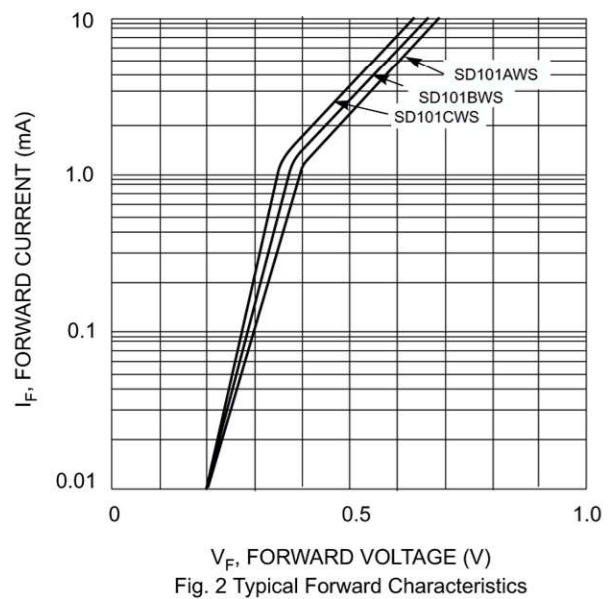
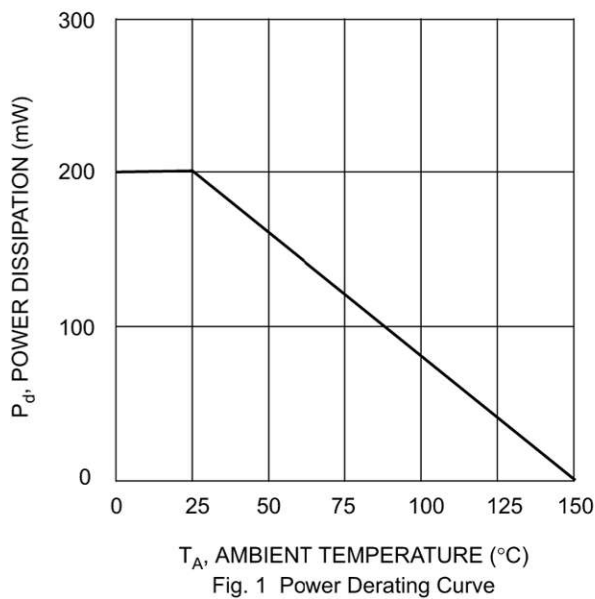
● Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SD101AWS	SD101BWS	SD101CWS	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	50	40	V
Working Peak Reverse Voltage	V_{RWM}				
DC Blocking Voltage	V_R				
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	I_{FSM}				50
					2.0
Power Dissipation (Note 1)	P_d	200			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625			$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125			$^\circ\text{C}$

Note: 1. Part mounted on FR-4 PC board with recommended pad layout.

● **Electrical Characteristics** @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic		Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	SD101AWS SD101BWS SD101CWS	$V_{(BR)R}$	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	SD101AWS SD101BWS SD101CWS SD101AWS SD101BWS SD101CWS	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	SD101AWS SD101BWS SD101CWS	I_{RM}	—	200	nA	$V_R = 50\text{V}$ $V_R = 40\text{V}$ $V_R = 30\text{V}$
Total Capacitance	SD101AWS SD101BWS SD101CWS	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	$I_F = I_R = 5.0\text{mA}$, $t_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$



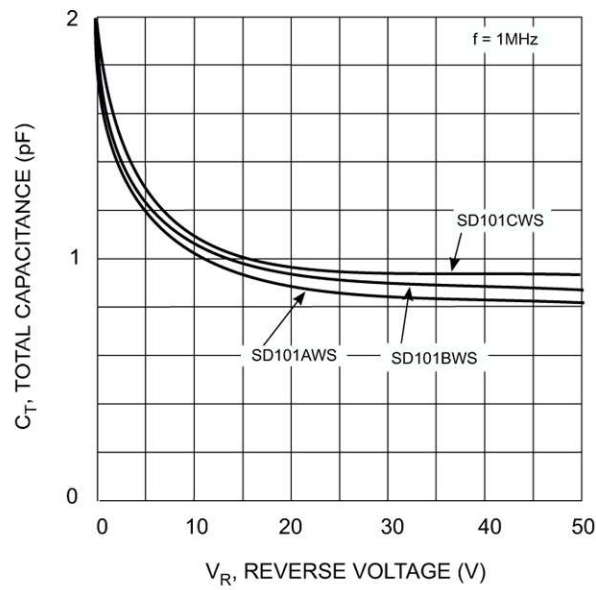


Fig. 3 Total Capacitance vs Reverse Voltage

Ordering Information

Device	Packaging	Shipping
SD101AWS	SOD-323	3000/Tape & Reel
SD101BWS	SOD-323	3000/Tape & Reel
SD101CWS	SOD-323	3000/Tape & Reel