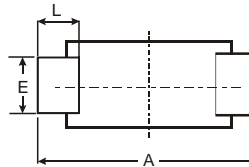
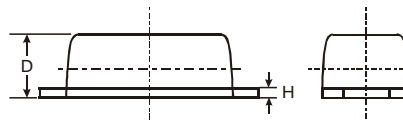
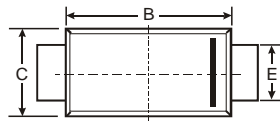


Features

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

Mechanical Data

- Case: SOD-123FL
plastic body over passivated junction
- Terminals : Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight: 0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	SD101AW	SD101BW	SD101CW	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 @ t ≤ 1.0s @ t = 10μs	I _{FSM}		50 2.0		mA A
Power Dissipation (Note 1)	P _d		400		mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}		300		°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	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	SD101AW SD101BW SD101CW V _{(BR)R}	60 50 40	—	V	I _R = 10μA I _R = 10μA I _R = 10μA
Forward Voltage Drop (Note 2)	SD101AW SD101BW SD101CW SD101AW SD101BW SD101CW V _{FM}	—	0.41 0.40 0.39 1.00 0.95 0.90	V	I _F = 1.0mA I _F = 1.0mA I _F = 1.0mA I _F = 15mA I _F = 15mA I _F = 15mA
Peak Reverse Current (Note 2)	SD101AW SD101BW SD101CW I _{RM}	—	200	nA	V _R = 50V V _R = 40V V _R = 30V
Total Capacitance	SD101AW SD101BW SD101CW C _T	—	2.0 2.1 2.2	pF	V _R = 0V, f = 1.0MHz
Reverse Recovery Time	t _{rr}	—	1.0	ns	I _F = I _R = 5.0mA, I _{rr} = 0.1 x I _R , R _L = 100Ω

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

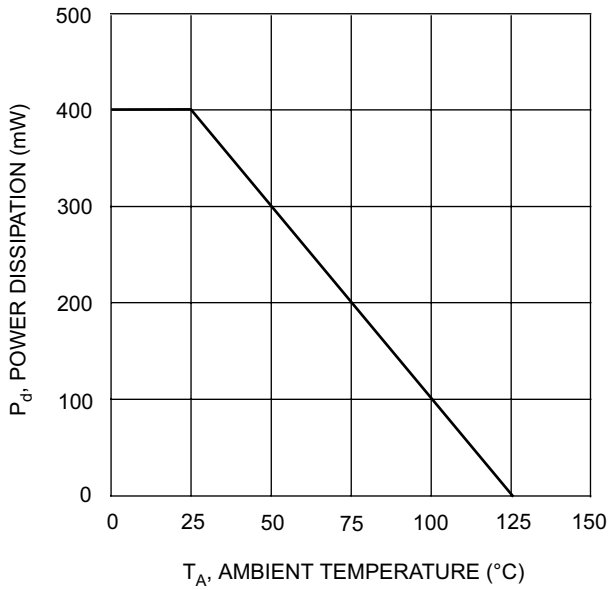


Fig. 1 Power Derating Curve

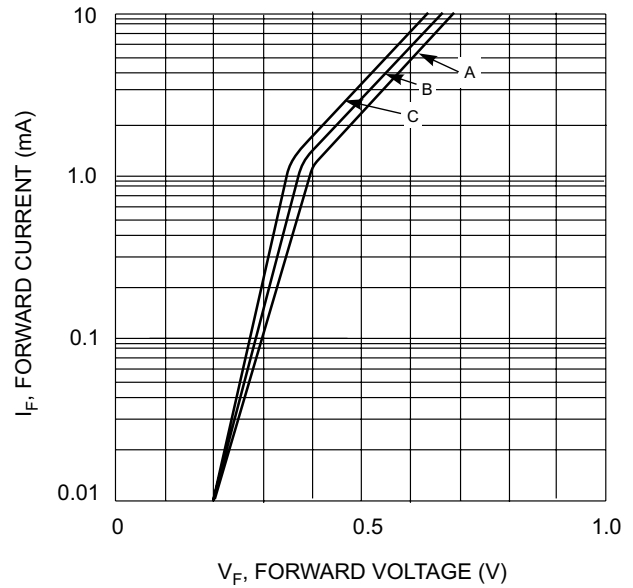


Fig. 2 Typical Forward Characteristic

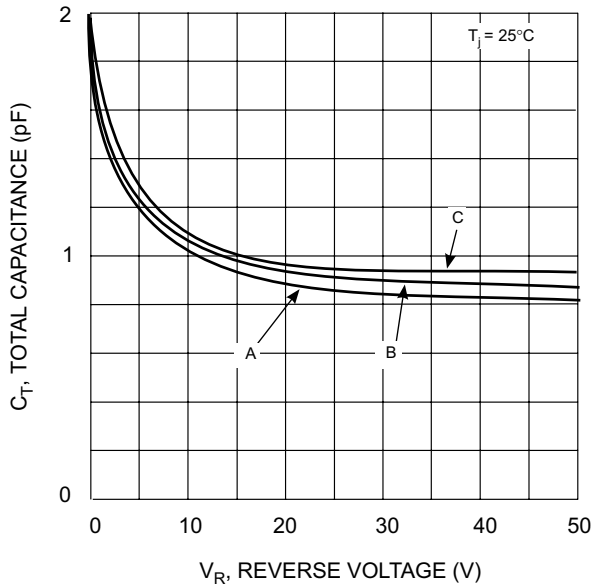


Fig. 3 Typ. Total Capacitance vs Reverse Voltage