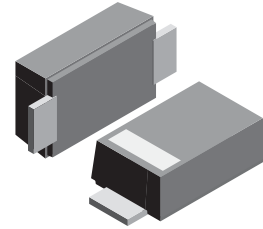


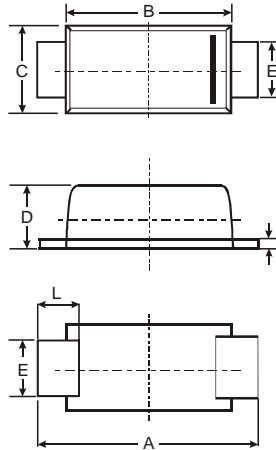
### Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application



### 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 @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	30	V
Forward Continuous Current (Note 1)	$I_F$	200	mA
Repetitive Peak Forward Current (Note 1) @ $t < 1.0\text{s}$	$I_{FRM}$	500	mA
Non-Repetitive Peak Forward Surge Current @ $t < 10\text{ms}$	$I_{FSM}$	4.0	A
Power Dissipation	$P_d$	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +125	$^{\circ}\text{C}$

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

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	30	—	—	V	@ $I_{RS} = 100\mu\text{A}$
Forward Voltage	$V_F$	—	—	0.4 1.0 0.33 1.0	V	@ $I_F = 10\text{mA}$ @ $I_F = 200\text{mA}$ @ $I_F = 2\text{mA}$ @ $I_F = 200\text{mA}$
Reverse Leakage Current	$I_R$	—	—	0.5	$\mu\text{A}$	@ $V_R = 25\text{V}$
Junction Capacitance	$C_j$	—	—	10	pF	$V_R = 1.0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	—	—	5	nS	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1\text{mA}, R_L = 100\Omega$

Note: 1. Valid provided that terminals are kept at ambient temperature.

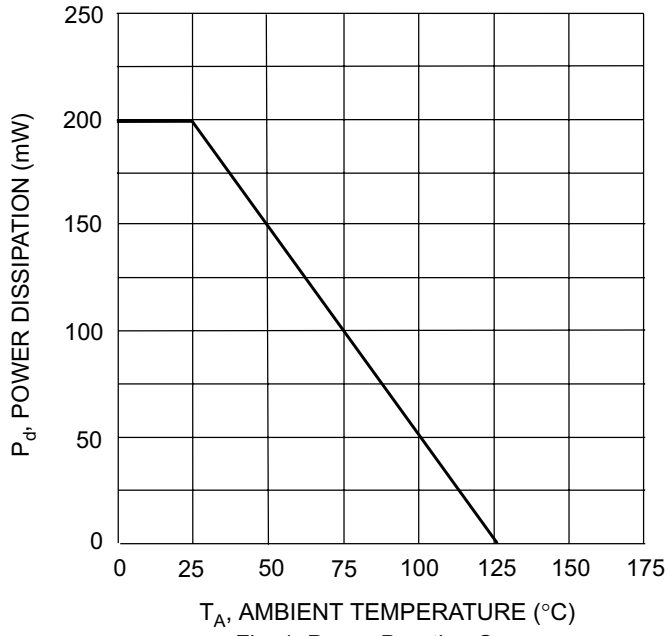


Fig. 1 Power Derating Curve