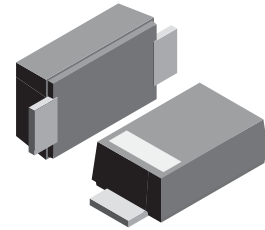


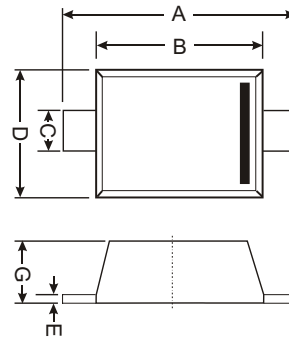
Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Ultra-Small Surface Mount Package



Mechanical Data

- Case: SOD-523, Plastic
- Case material - UL Flammability Rating Classification 94V-0
- Weight: 0.002 grams (approx.)



SOD-523		
Dim	Min	Max
A	1.50	1.70
B	1.10	1.30
C	0.25	0.35
D	0.70	0.90
E	0.10	0.20
G	0.50	0.70
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	70	V
RMS Reverse Voltage	$V_{R(RMS)}$	49	V
Forward Continuous Current	I_{FM}	70	mA
Non-Repetitive Peak Forward Surge Current @ $t_p < 1.0\text{s}$	I_{FSM}	100	mA
Power Dissipation	P_d	150	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Operating Temperature Range	T_j	-55 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

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

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	70	—	—	$I_R = 10\mu\text{A}$
Forward Voltage (Note 2)	V_F	—	410 1000	mV	$t_p < 300\mu\text{s}$, $I_F = 1.0\text{mA}$ $t_p < 300\mu\text{s}$, $I_F = 15\text{mA}$
Leakage Current (Note 2)	I_R	—	100	nA	$t_p < 300\mu\text{s}$, $V_R = 50\text{V}$
Total Capacitance	C_T	—	2.0	pF	$V_R = 0\text{V}$, $f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	5.0	ns	$I_F = I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$