

Features

- Peak Forward Current : $I_{FM}=350\text{mA}$
- Power Dissipation of 150mw



SOD523



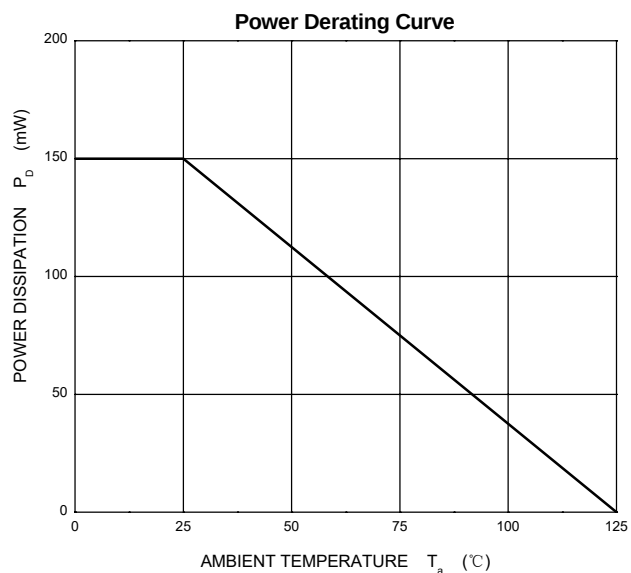
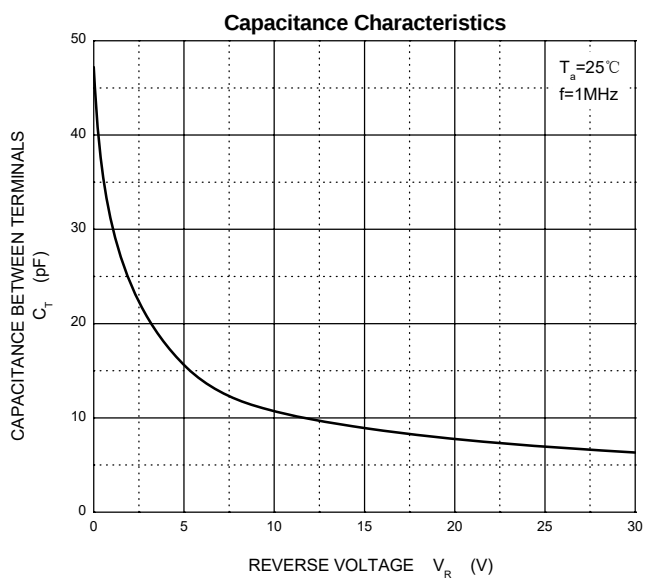
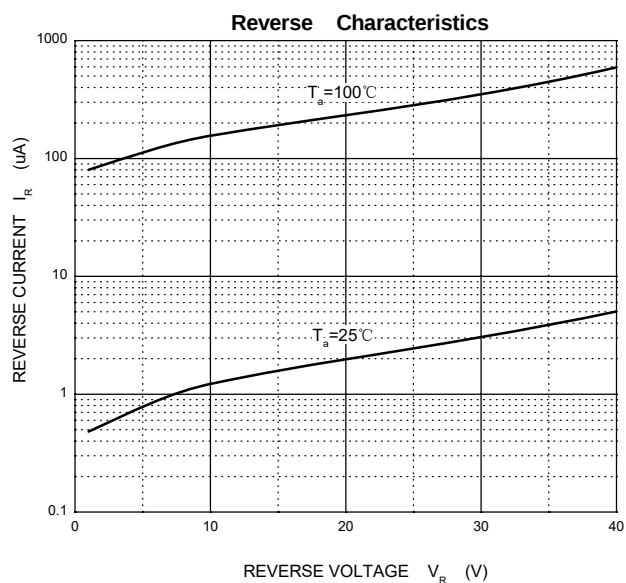
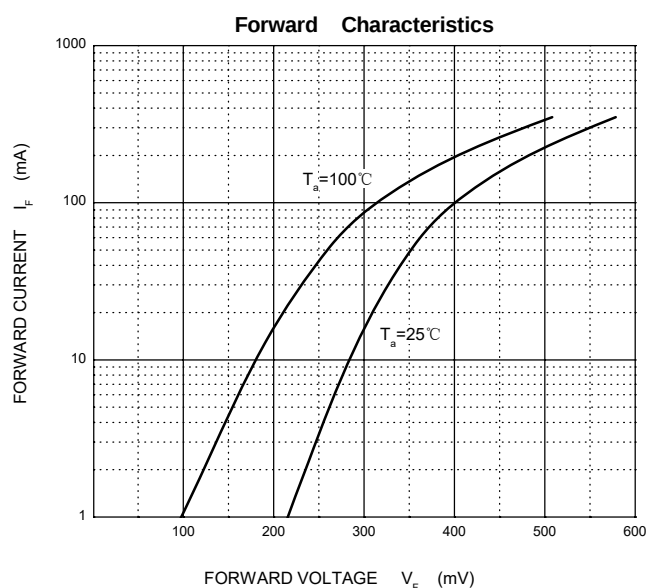
Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	40	V
V_{RWM}	Working Peak Reverse Voltage		
V_R	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_{FM}	Forward Continuous Current	350	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current@t=8.3ms	2	A
P_D	Power Dissipation	150	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	667	°C/W
T_j	Junction Temperature	125	°C
T_{stg}	Storage Temperature	-55~+150	°C

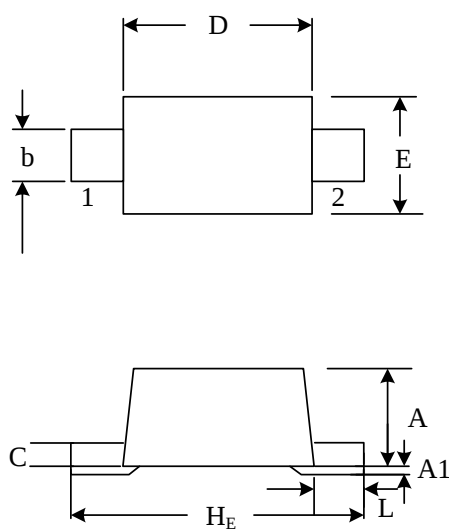
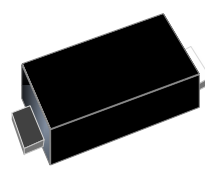
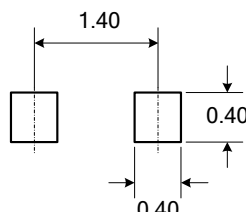
Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	$I_R=100\mu A$	40			V
Reverse current	I_R	$V_R=30V$			5	μA
		$V_R=20V$			2	
		$V_R=10V$			1	
Forward voltage	V_F	$I_F=1mA$		0.27		V
		$I_F=5mA$		0.32		
		$I_F=20mA$			0.37	
		$I_F=200mA$			0.6	
Total capacitance	C_{tot}	$V_R=0V, f=1MHz$		50		pF
Reverse recovery time	t_{rr}	$I_F=I_R=200mA, I_{rr}=0.1 \times I_R, R_L=100\Omega$		10		ns

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



Outline Drawing – SOD523

PACKAGE OUTLINE 	 SOD523 <table><tr><th colspan="5">DIMENSIONS</th></tr><tr><th rowspan="2">SYMBOL L</th><th colspan="2">MILLIMETERS</th><th colspan="2">INCHES</th></tr><tr><th>MIN</th><th>MAX</th><th>MIN</th><th>MAX</th></tr><tr><td>A</td><td>0.50</td><td>0.70</td><td>0.020</td><td>0.028</td></tr><tr><td>A1</td><td>0.00</td><td>0.07</td><td>0.000</td><td>0.003</td></tr><tr><td>b</td><td>0.25</td><td>0.35</td><td>0.010</td><td>0.014</td></tr><tr><td>C</td><td>0.07</td><td>0.20</td><td>0.003</td><td>0.008</td></tr><tr><td>D</td><td>1.10</td><td>1.30</td><td>0.043</td><td>0.051</td></tr><tr><td>E</td><td>0.70</td><td>0.90</td><td>0.028</td><td>0.035</td></tr><tr><td>H_E</td><td>1.50</td><td>1.70</td><td>0.059</td><td>0.067</td></tr><tr><td>L</td><td>0.15</td><td>0.25</td><td>0.006</td><td>0.010</td></tr></table>	DIMENSIONS					SYMBOL L	MILLIMETERS		INCHES		MIN	MAX	MIN	MAX	A	0.50	0.70	0.020	0.028	A1	0.00	0.07	0.000	0.003	b	0.25	0.35	0.010	0.014	C	0.07	0.20	0.003	0.008	D	1.10	1.30	0.043	0.051	E	0.70	0.90	0.028	0.035	H _E	1.50	1.70	0.059	0.067	L	0.15	0.25	0.006	0.010
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