



Features

- Average Rectified Output Current: $I_O=1\text{ A}$
- Power Dissipation of 500mW

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
STPS140Z	SOD-123	SL	3000



SOD-123



Maximum Ratings ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

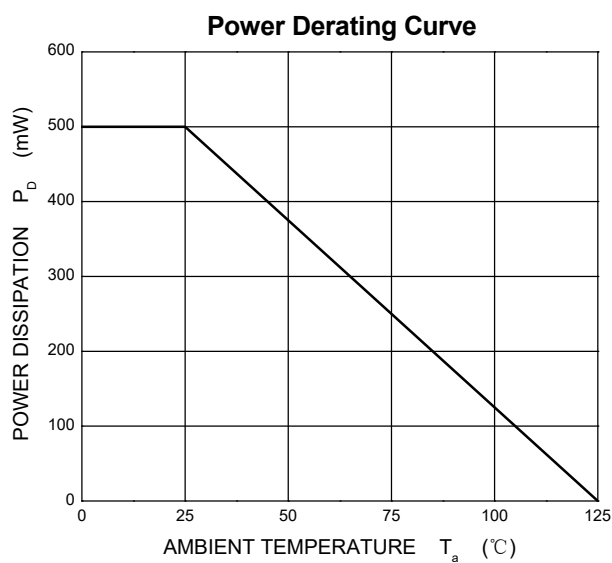
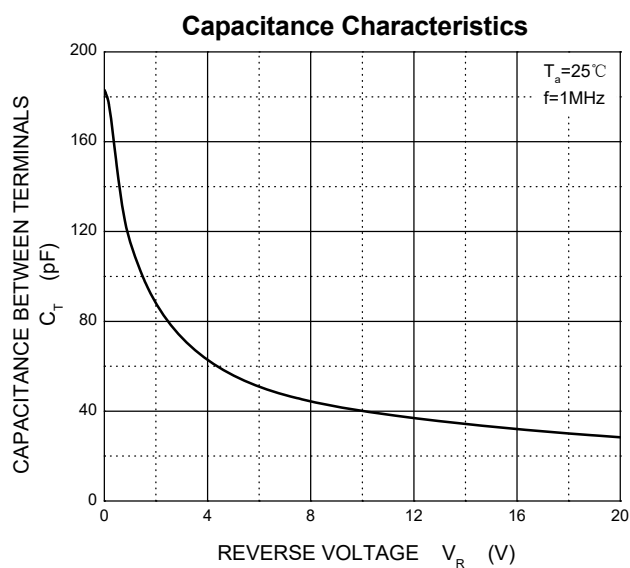
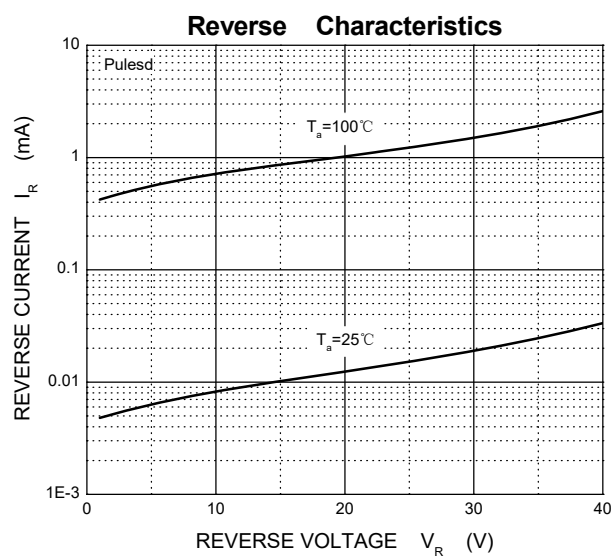
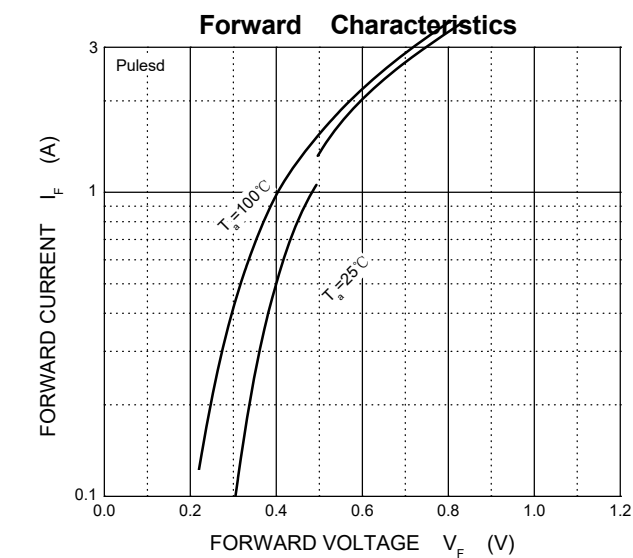
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	40	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	9	A
Repetitive Peak Forward Current	I_{FRM}	1.5	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	$^{\circ}\text{C/W}$
Operation Junction temperature Range	T_J	-40~+125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R=1\text{mA}$	40		V
Reverse voltage leakage current	I_R	$V_R=40\text{V}$		1	mA
Forward voltage	V_F	$I_F=1\text{A}$ $I_F=3\text{A}$		0.6 0.9	V
Diode capacitance	C_D	$V_R=4\text{V}$, $f=1\text{MHz}$		120	pF

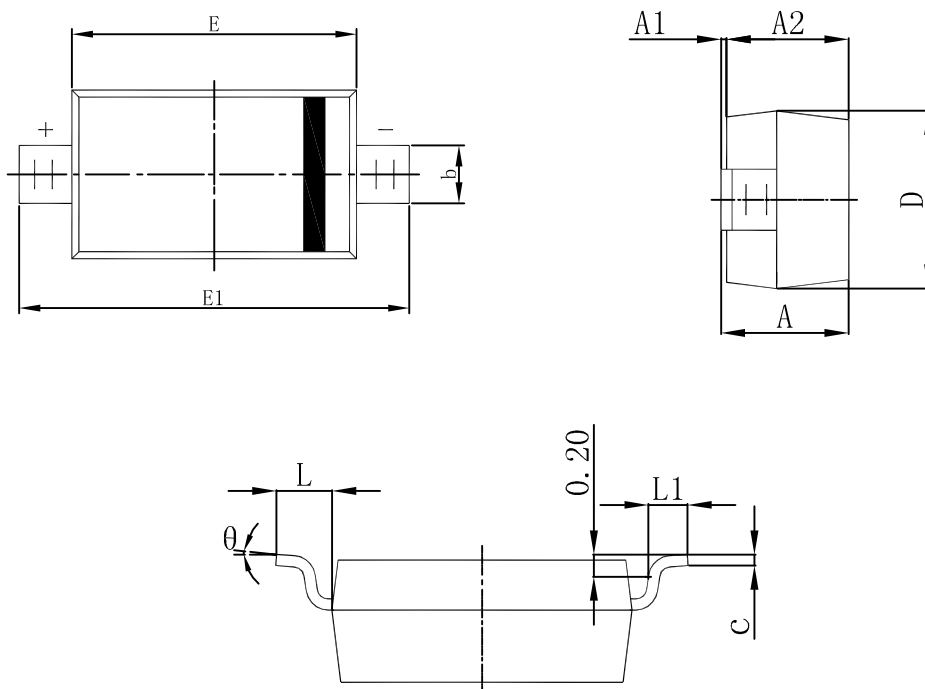


Typical Characteristics





SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



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