



## Features

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



SOD-123

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
1N5817W	SOD-123	SJ	3000



## Maxmim Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	20	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified Output Current	$I_O$	1	A
Non-repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	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	°C/W
Operation Junction temperature Range	$T_J$	-40~+125	°C
Storage Temperature Range	$T_{STG}$	-55~+150	°C

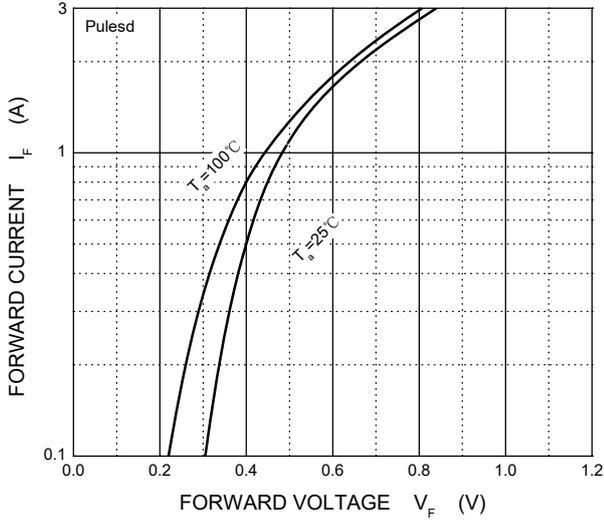
## Electrcal Characteristics (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 1mA$	20		V
Reverse voltage leakage current	$I_R$	$V_R = 20V$		1	mA
Forward voltage	$V_F$	$I_F = 1A$ $I_F = 3A$		0.45 0.75	V
Diode capacitance	$C_D$	$V_R = 4V, f = 1MHz$		120	pF

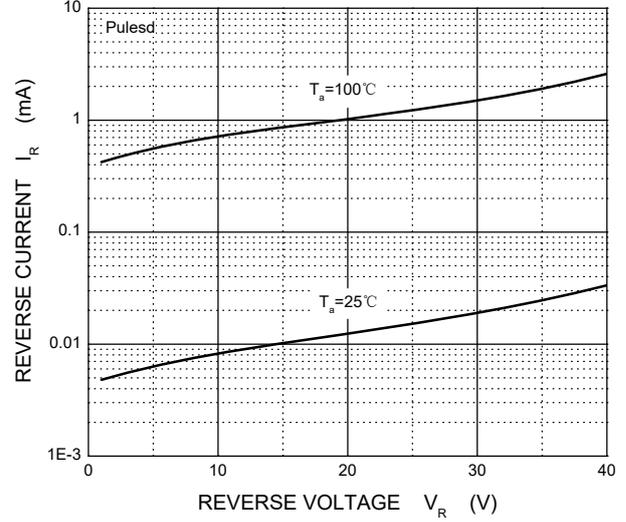


### Typical Characteristics

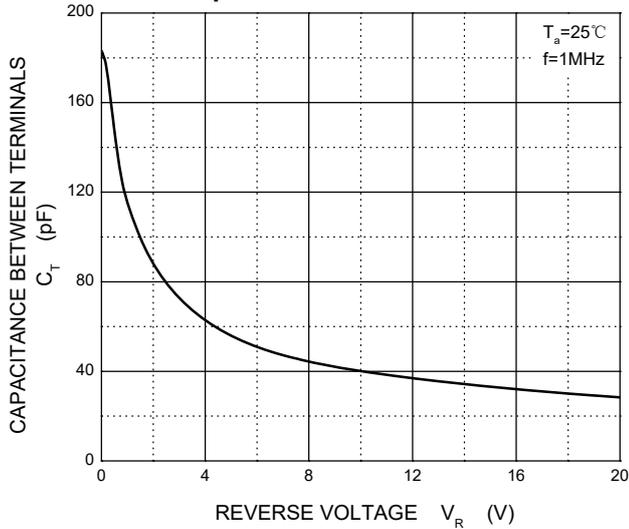
#### Forward Characteristics



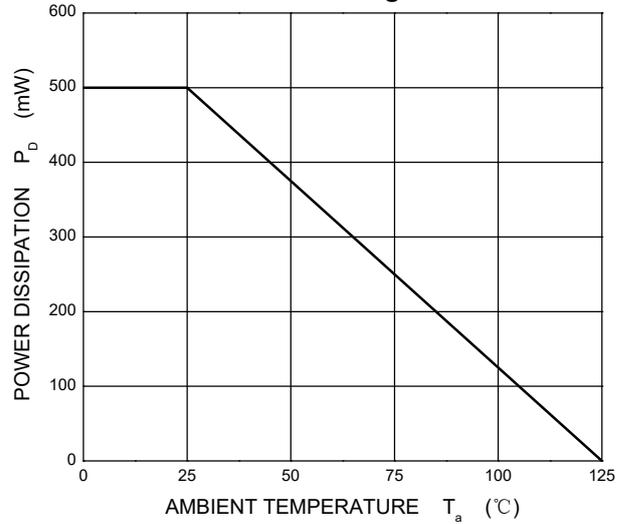
#### Reverse Characteristics



#### Capacitance Characteristics

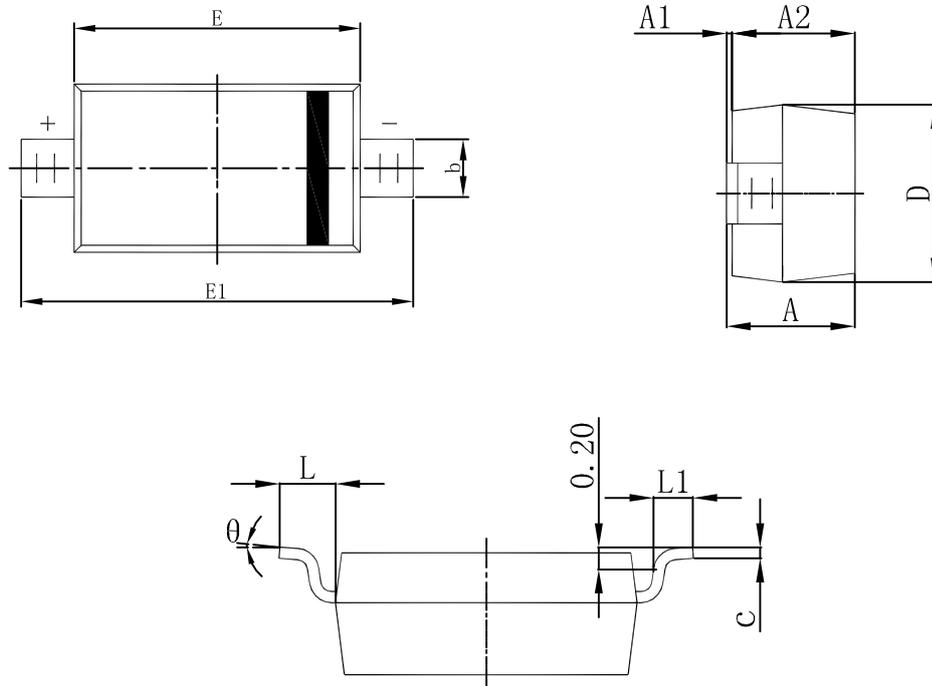


#### Power Derating Curve





### 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
$\theta$	0°	8°	0°	8°



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