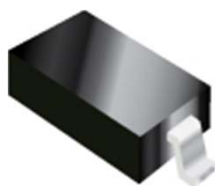




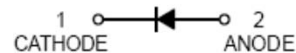
1N58xxW SERIES



Plastic-Encapsulate Diodes



SOD-123



Features

- Low Forward Voltage Drop
- Surface Mount Package Ideally Suited for Automatic Insertion
- High Current Capability

Ordering Information

Part No.	Remark	Package	Packing
1N58xxW SERIES	RoHS Compliant	SOD-123	3000 / Tape & Reel
1N58xxW SERIES-H	Halogen Free		

Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	1N5817W	1N5818W	1N5819W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	20	30	40	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	20	30	40	V
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectified Output Current	I_O	1			A
Peak Forward Surge Current @t=8.3ms	I_{FSM}	9			A
Power Dissipation	P_D	500			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250			°C/W
Storage Temperature Range	T_{STG}	-55~+150			°C
Marking Code		SJ	SK	SL	

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

Parameter	Symbol	1N5817W	1N5818W	1N5819W	Unit
Reverse Breakdown Voltage @ $I_R=1mA$	$V_{(BR)}$	20	30	40	V
Maximum Reverse Current 1N5817W@ $V_R=20V$ 1N5818W@ $V_R=30V$ 1N5819W@ $V_R=40V$	I_R	1			mA
Maximum Forward Voltage $I_F=1A$ $I_F=3A$	V_F	0.45 0.75	0.55 0.875	0.6 0.9	V
Maximum Diode Capacitance @ $V_R=4V, f=1MHz$	C_D	120			pF



Plastic-Encapsulate Diodes

Characteristics Curves

FIG. 1-Forward Characteristics (1N5817W)

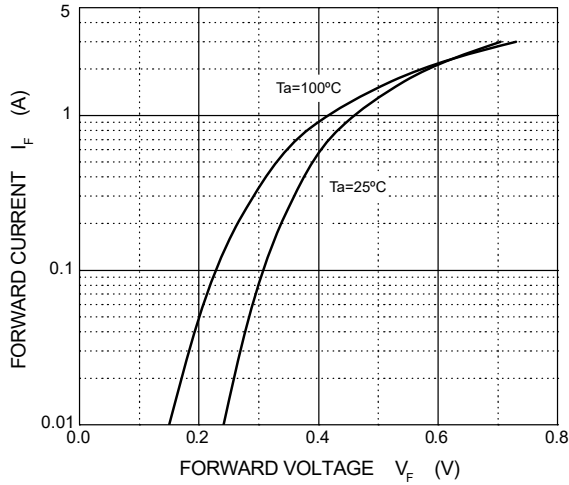


FIG. 2-Reverse Characteristics (1N5817W)

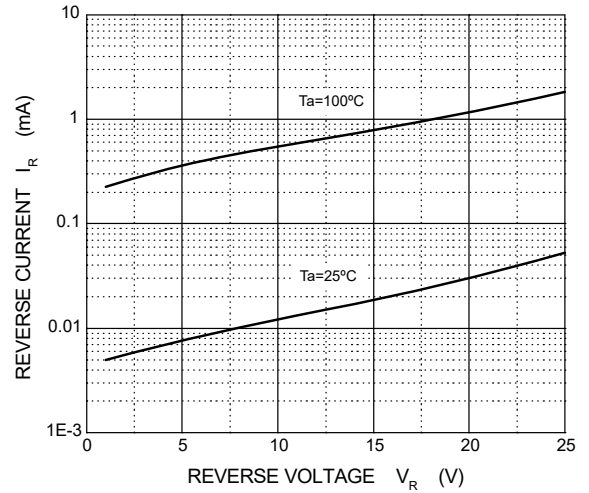


FIG. 3-Forward Characteristics (1N5818W)

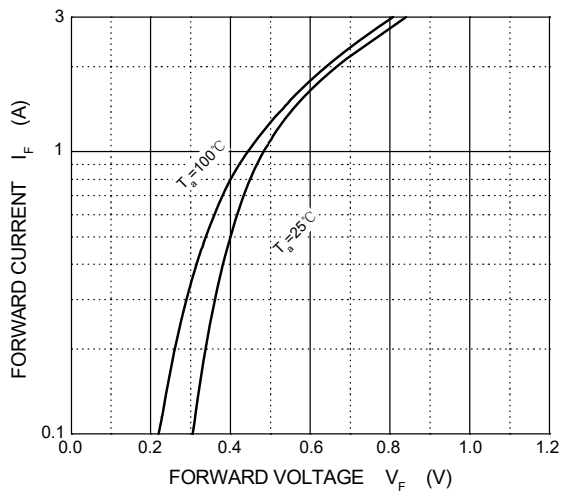


FIG. 4-Reverse Characteristics (1N5818W)

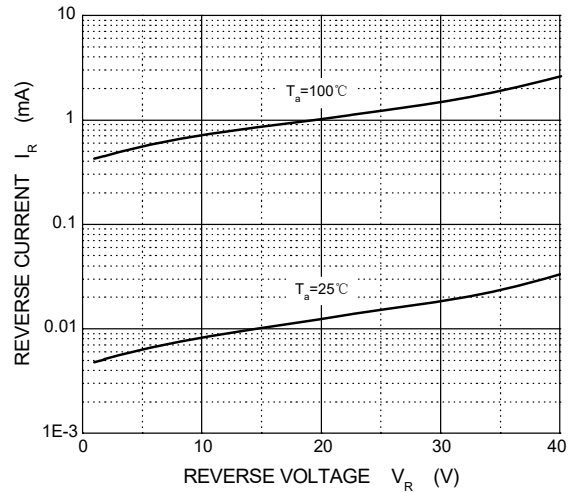


FIG. 5-Forward Characteristics (1N5819W)

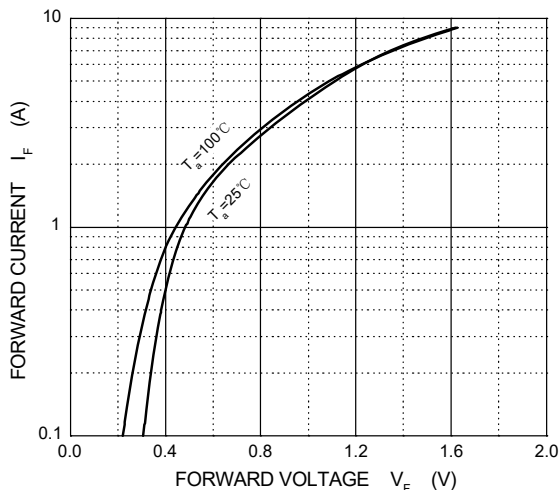
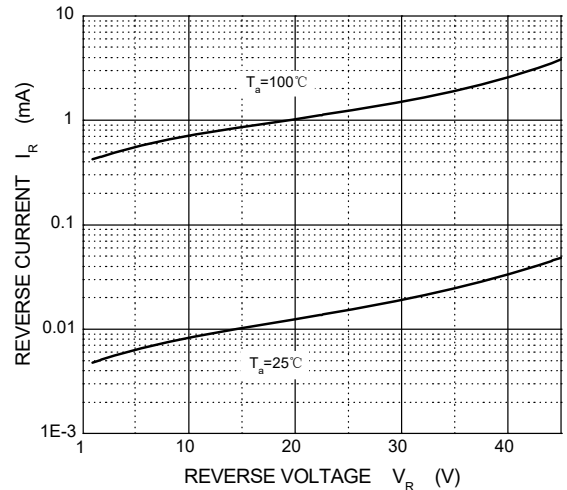
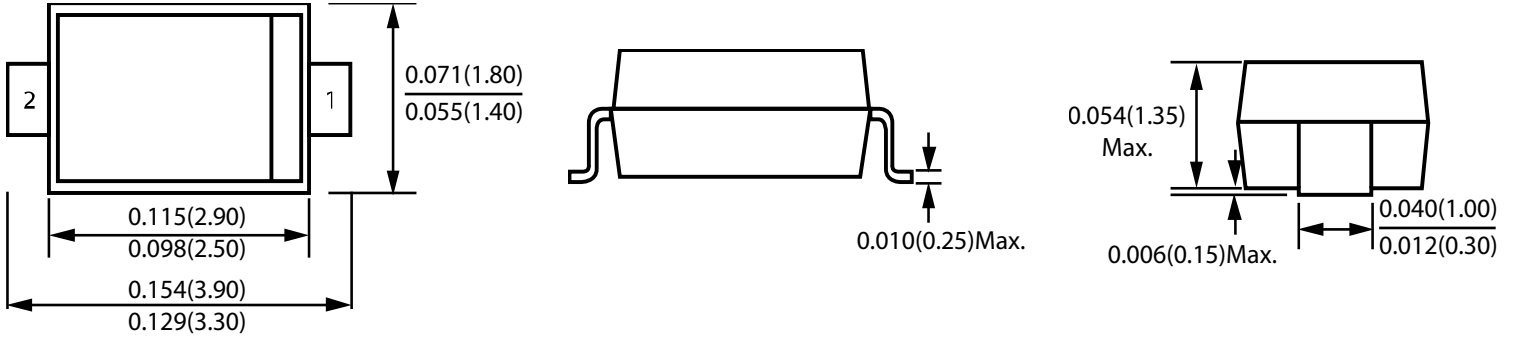


FIG. 6-Reverse Characteristics (1N5819W)





Package Outline Dimensions

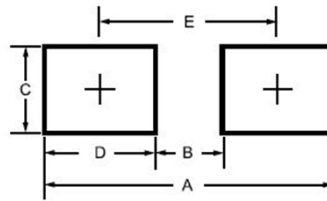


SOD-123

Dimensions in inches and (millimeters)

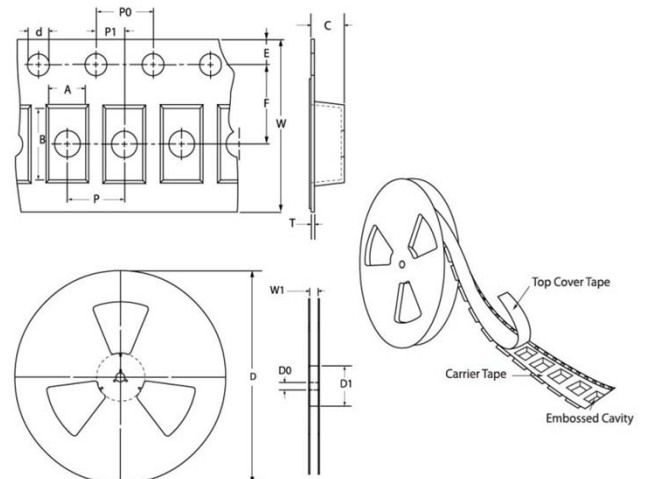
Suggested Pad Layout

Symbol	Outline	SOD-123 millimeters
A		4.90
B		2.50
C		1.20
D		1.20
E		3.70



Tape & Reel Specification

Item	Symbol	SOD-123 mm
Carrier width	A	1.95 ± 0.2
Carrier length	B	4.5 (max)
Carrier depth	C	2.4 (max)
Sprocket hole	d	1.55 ± 0.1
Reel outside diameter	D	178 ± 2.0
Reel inner diameter	D1	49 (min)
Feed hole width	D0	13 ± 1.0
Sprocket hole position	E	1.75 ± 0.1
Punch hole position	F	3.5 ± 0.1
Punch hole pitch	P	4.0 ± 0.1
Sprocket hole pitch	P0	4.0 ± 0.1
Embossment center	P1	2.0 ± 0.1
Overall tape thickness	T	0.4 (max)
Tape width	W	8.0 ± 0.3
Reel width	W1	15 (max)





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