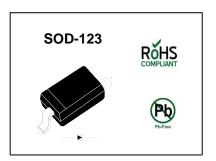


# **1A Surface Mount Schottky Barrier Diode**

#### **PINNING**

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)

Parameter	Symbol	Value	Unit	
Reverse Voltage	1N5817W 1N5818W 1N5819W	V <sub>R</sub>	20 30 40	V
Average Forward Rectified Current	I <sub>F(AV)</sub>	1	Α	
Non-Repetitive Peak Forward Surge Current (8.3 ms Single Half Sine-Wave)		I <sub>FSM</sub>	9	А
Power Dissipation		P <sub>tot</sub>	450	mW
Operating Temperature Range		T <sub>j</sub>	- 55 to + 125	°C
Storage Temperature Range		T <sub>stg</sub>	- 55 to + 125	°C

## Characteristics at T<sub>a</sub> = 25 °C

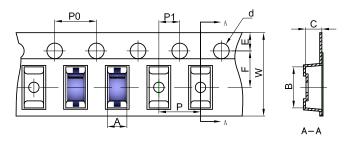
Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage					
at I <sub>R</sub> = 1 mA	1N5817W	V (BR)R	20	-	V
	1N5818W	V (BR)R	30	-	V
	1N5819W		40	-	
Reverse Current					
at $V_R = 20 \text{ V}$	1N5817W		-	1	
at $V_R = 30 \text{ V}$	1N5818W	LD	-	1	Л
at $V_R = 40 \text{ V}$	1N5819W	R	-	1	mA
at $V_R = 4 V$	1N5819W		-	0.05	
at $V_R = 6 V$	1N5819W		-	0.075	
Forward Voltage					
at I <sub>F</sub> = 0.1 A	1N5819W		-	0.45	
at I <sub>F</sub> = 1 A	1N5817W		-	0.45	
	1N5818W		-	0.55	
	1N5819W	$V_{F}$	-	0.6	V
at I <sub>F</sub> = 3 A	1N5817W		_	0.75	
·	1N5818W		_	0.875	
	1N5819W		-	0.9	
Total Capacitance		0		400	F
at V <sub>R</sub> = 4 V, f = 1 MHz		$C_{tot}$	-	120	pF

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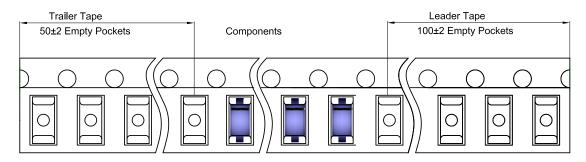
### SOD-123 Tape and Reel

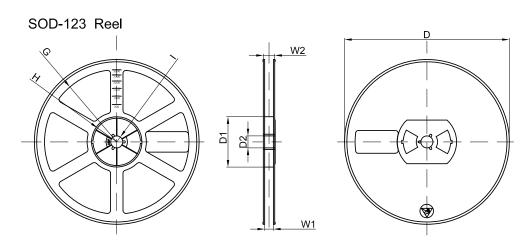
#### SOD-123 Embossed Carrier Tape



	Dimensions are in millimeter									
Pkg type	Pkg type A B C d E F P0 P P1 W							W		
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

### SOD-123 Tape Leader and Trailer



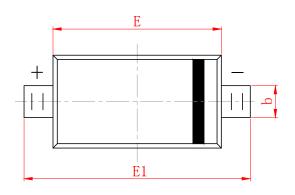


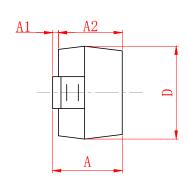
	Dimensions are in millimeter							
Reel Option	Reel Option D D1 D2 G H I W1 W2						W2	
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

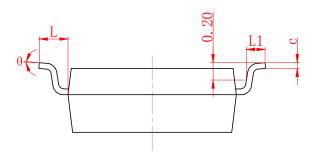
REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

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	MILLIMETER				
SYMBOL	MIN	MAX			
A	1.050	1. 250			
A1	0. 000	0. 100			
A2	1.050	1. 150			
b	0. 450	0.650			
С	0. 008	0. 150			
D	1. 500	1. 700			
Е	2. 600	2.800			
E1	3. 550	3.850			
L	0. 500	(REF)			
L1	0. 250	0. 450			
θ	0°	8°			

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