

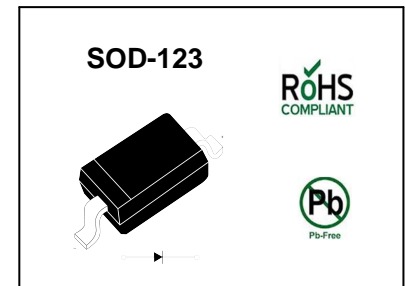
### Surface Mount Schottky Barrier Diode

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

#### Features

- Low forward voltage
- High conductance



#### Absolute Maximum Ratings ( $T_a = 25\text{ }^{\circ}\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Reverse Voltage	$V_R$	40	V
Average Rectified Forward Current	$I_{F(AV)}$	500	mA
Non-Repetitive Peak Forward Surge Current (Half Wave, Single Phase, 60 Hz)	$I_{FSM}$	5.5	A
Thermal Resistance Junction to Lead <sup>1)</sup>	$R_{\theta JL}$	118	$^{\circ}\text{C/W}$
Thermal Resistance Junction to Ambient <sup>2)</sup>	$R_{\theta JA}$	206	$^{\circ}\text{C/W}$
Operating Junction Temperature Range	$T_j$	- 65 to + 150	$^{\circ}\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^{\circ}\text{C}$

1) Device mounted on FR-4 PCB 0.013 mm.

2) 1 inch" pad size (1 X 0.5 inch for each lead ) on FR4 board.

#### Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.5\text{ A}$ at $I_F = 1\text{ A}$ at $I_F = 0.5\text{ A}$ , $T_a = 100\text{ }^{\circ}\text{C}$ at $I_F = 1\text{ A}$ , $T_a = 100\text{ }^{\circ}\text{C}$	$V_F$	0.51 0.62 0.46 0.61	V
Reverse Current at $V_R = 20\text{ V}$ at $V_R = 40\text{ V}$ at $V_R = 20\text{ V}$ , $T_a = 100\text{ }^{\circ}\text{C}$ at $V_R = 40\text{ V}$ , $T_a = 100\text{ }^{\circ}\text{C}$	$I_R$	10 20 5 13	$\mu\text{A}$ $\mu\text{A}$ mA mA

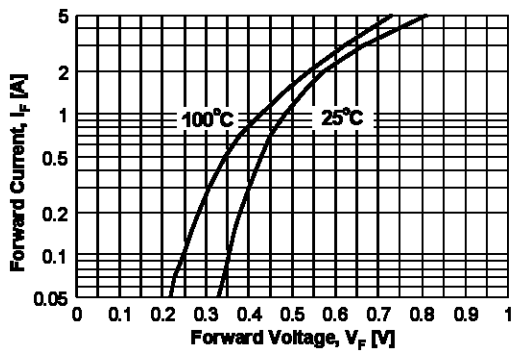


Figure 1. Forward Voltage Characteristics

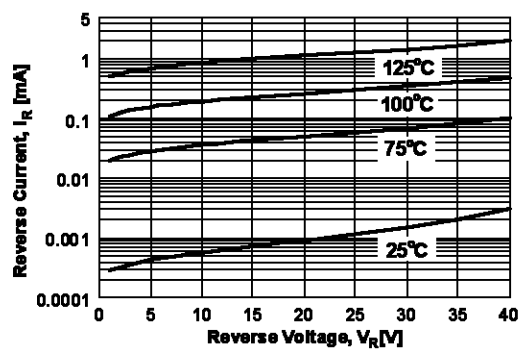


Figure 2. Reverse Current vs Reverse Voltage

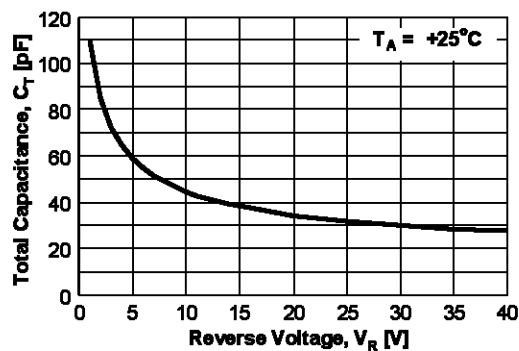
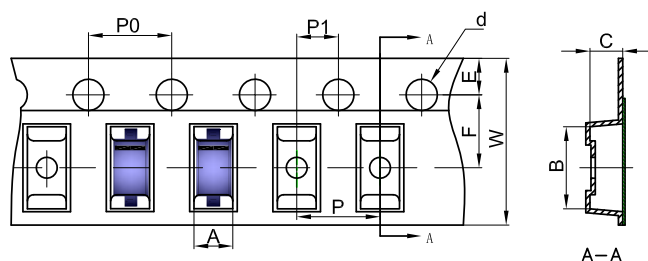


Figure 3. Total Capacitance

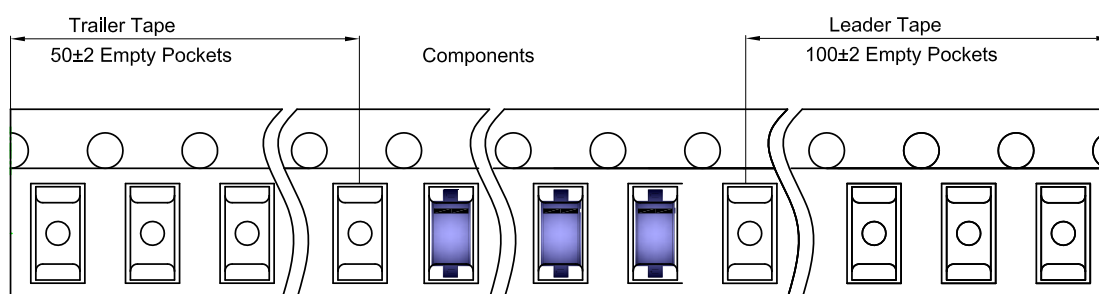
### SOD-123 Tape and Reel

#### SOD-123 Embossed Carrier Tape

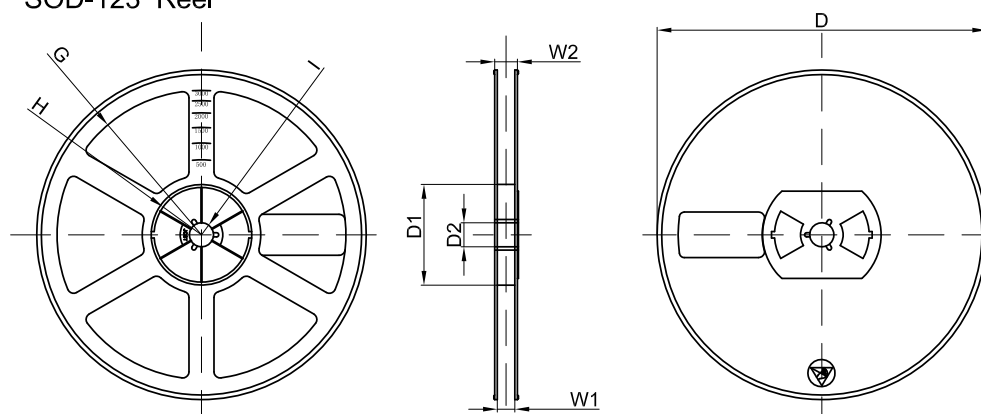


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

#### SOD-123 Tape Leader and Trailer

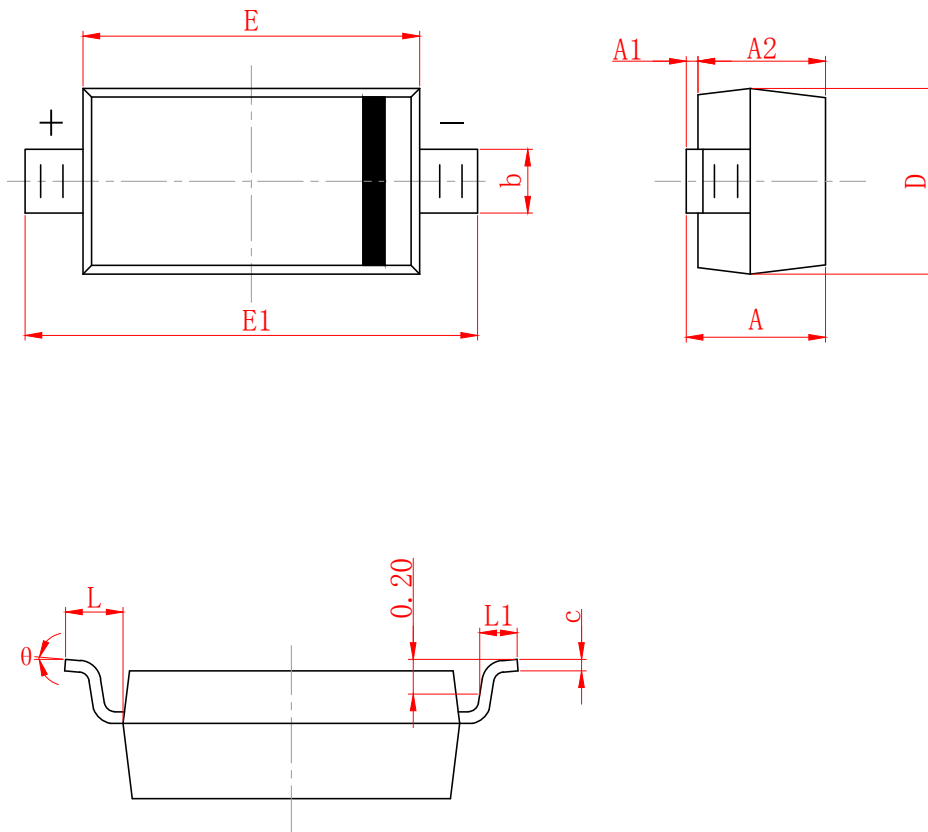


#### SOD-123 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	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	



SYMBOL	MILLIMETER	
	MIN	MAX
A	1.050	1.250
A1	0.000	0.100
A2	1.050	1.150
b	0.450	0.650
c	0.008	0.150
D	1.500	1.700
E	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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