

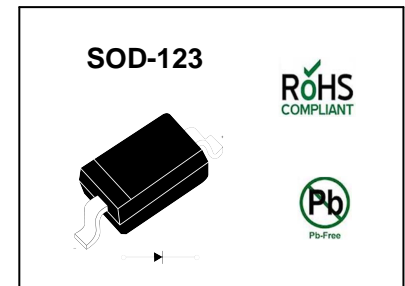
Surface Mount Schottky Barrier Diode

Features

- Low Forward Voltage
- Package Designed for Optimal Automated Board Assembly

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
Working Peak Reverse Voltage	V_{RWM}	30	V
DC Blocking Voltage	V_R	30	V
Average Rectified Forward Current (Rated V_R) $T_L = 65^\circ\text{C}$	$I_{F(AV)}$	1	A
Non-Repetitive Peak Forward Surge Current (Surge Applied at Rated Load Conditions, Halfwave, Single Phase, 60 Hz)	I_{FSM}	5.5	A
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	230 ¹⁾	$^\circ\text{C/W}$
Thermal Resistance, Junction to Lead	$R_{\theta JL}$	108 ¹⁾	$^\circ\text{C/W}$
Operating Junction Temperature	T_j	- 65 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 125	$^\circ\text{C}$

¹⁾ FR-4 or FR-5 = 3.5 X 1.5 inches using a 1 inch Cu pad.

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

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 0.1\text{ A}$ at $I_F = 0.7\text{ A}$	V_F	- -	0.35 0.5	V
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	30	-	V
Reverse Current at $V_R = 30\text{ V}$ at $V_R = 5\text{ V}$	I_R	- -	200 50	μA

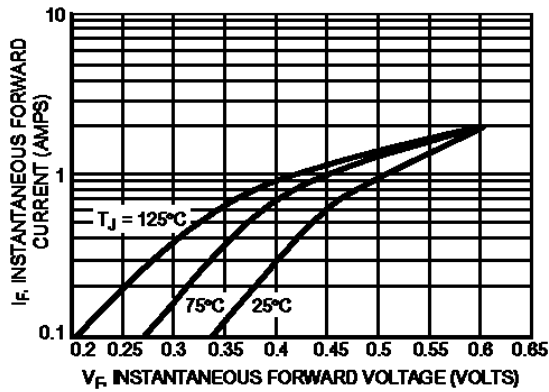


Figure 1. Maximum Forward Voltage

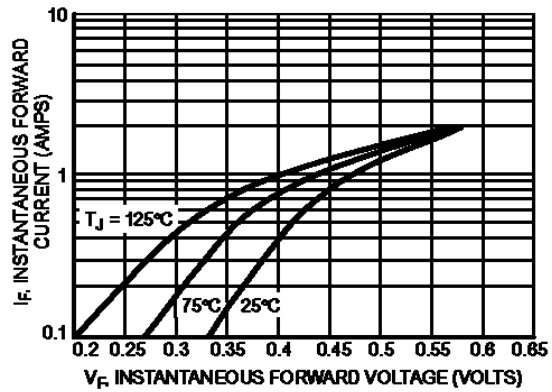


Figure 2. Typical Forward Voltage

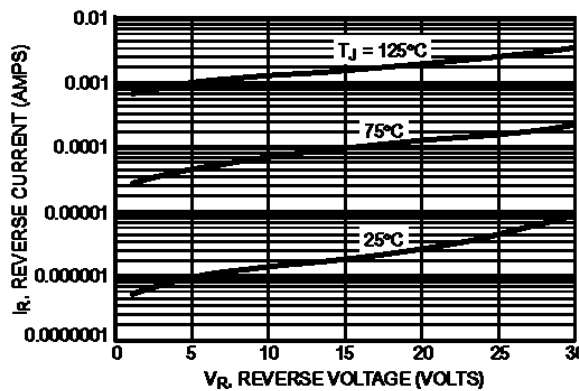


Figure 3. Typical Reverse Current

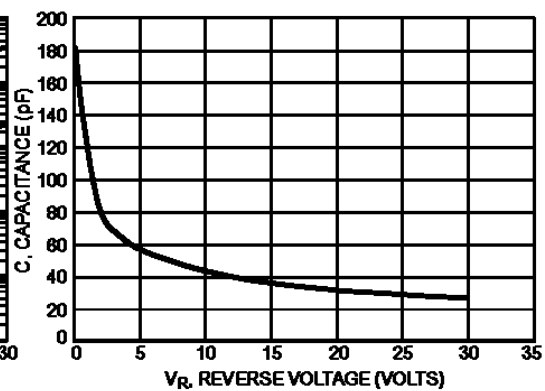


Figure 4. Typical Capacitance

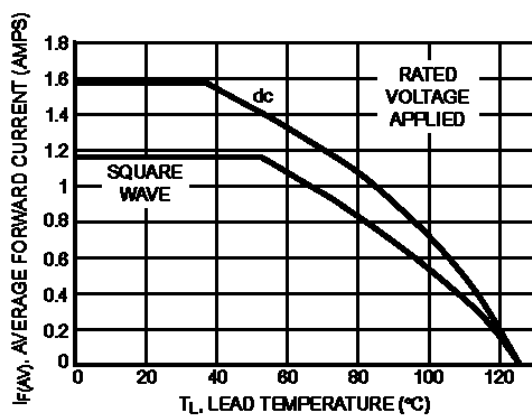


Figure 5. Current Derating, Lead, $R_{\theta JL} = 108^{\circ}\text{C/W}$

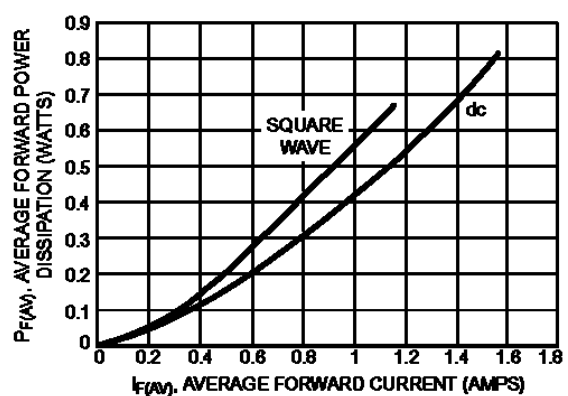
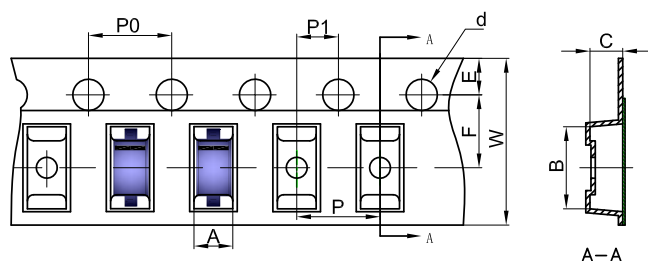


Figure 6. Forward Power Dissipation

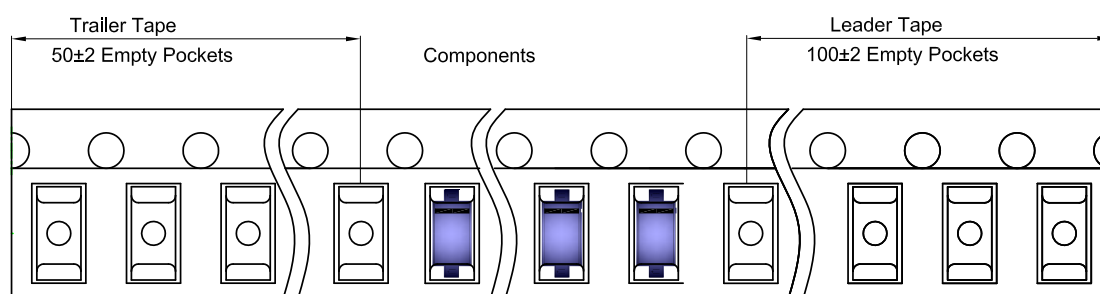
SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

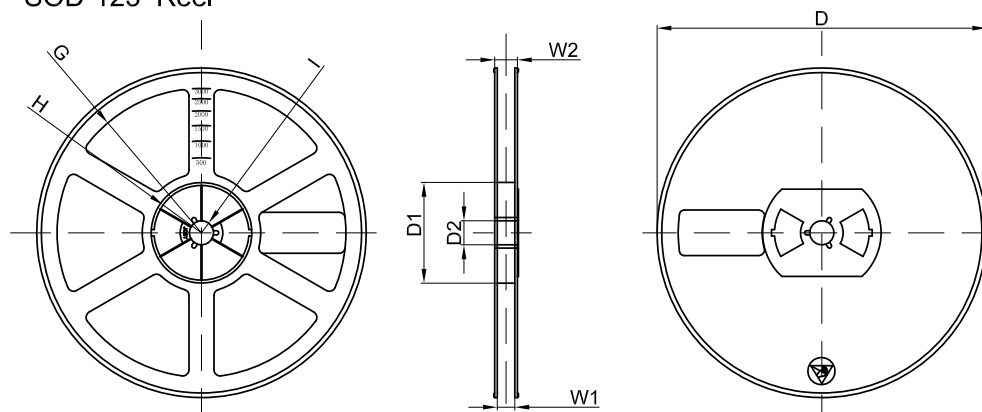


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOD-123 Tape Leader and Trailer

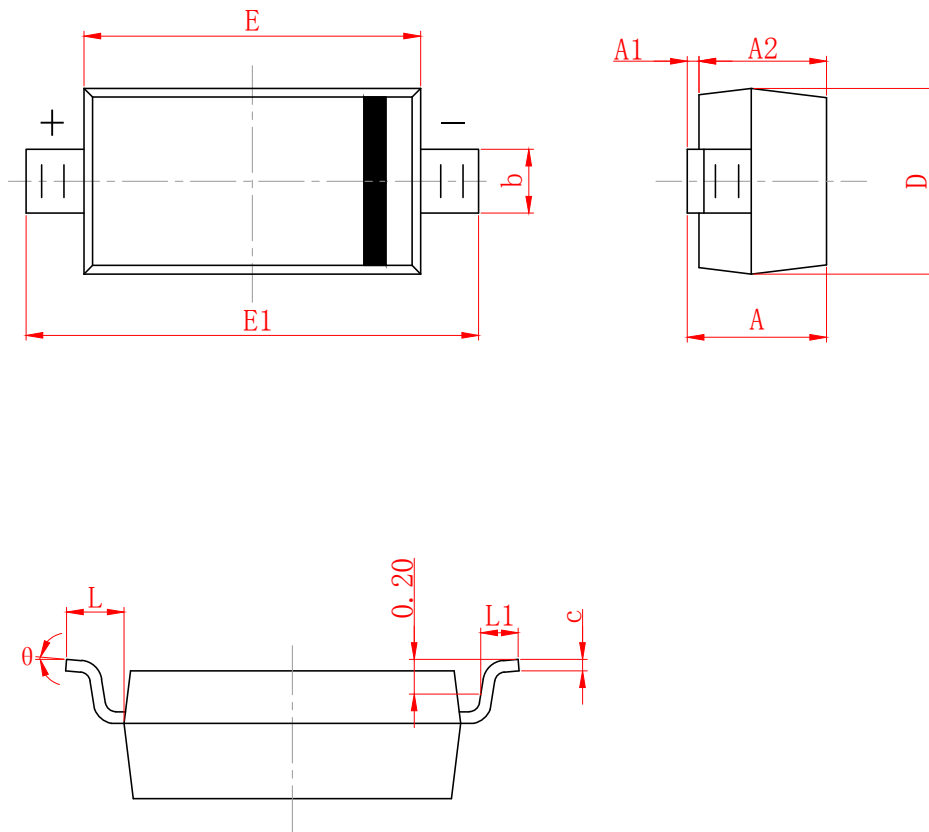


SOD-123 Reel



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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