

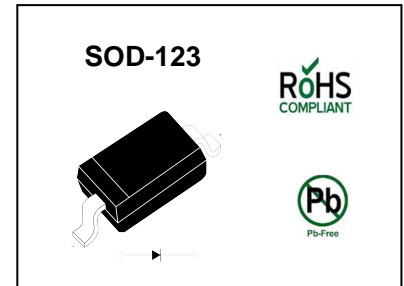
SURFACE MOUNT SCHOTTKY BARRIER DIODE

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Features

- Low Forward Voltage Drop
- Fast Switching



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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Reverse Voltage	V_R	30	V
Forward Continuous Current	I_{FM}	200	mA
Repetitive Peak Forward Current at $t < 1$ s	I_{FRM}	500	mA
Non-repetitive Peak Forward Surge Current at $t < 10$ ms	I_{FSM}	2	A
Power Dissipation	P_{tot}	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{Stg}	- 55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\ \mu\text{A}$	$V_{(BR)R}$	30	-	V
Reverse Current at $V_R = 25$ V	I_R	-	500	nA
Forward Voltage at $I_F = 200$ mA	V_F	-	1	V
at $I_F = 10$ mA		-	0.4	V
at $I_F = 50$ mA		-	0.65	V
at $I_F = 2$ mA		0.26	0.33	V
at $I_F = 15$ mA		-	0.45	V
Total Capacitance at $V_R = 1$ V, $f = 1$ MHz	C_T	-	10	pF
Reverse Recovery Time at $I_F = I_R = 10$ mA, $I_{rr} = 0.1 \times I_R$, $R_L = 100\ \Omega$	t_{rr}	-	5	ns

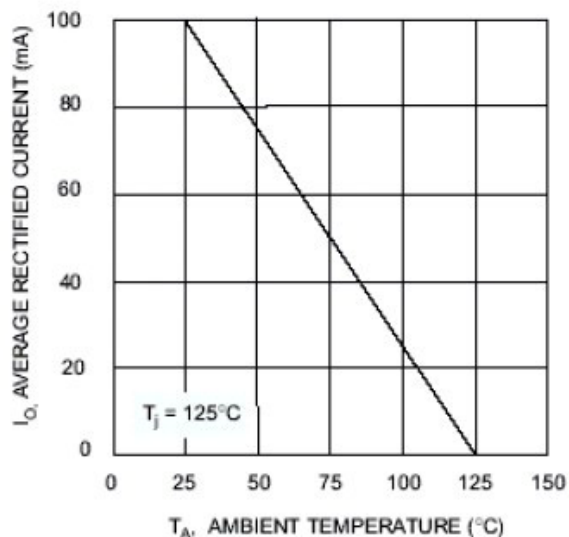


Fig. 1 Forward Current Derating Curve

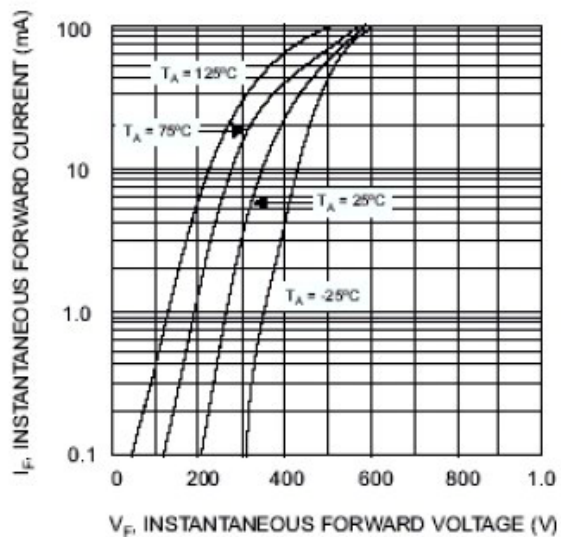


Fig. 2 Typical Forward Characteristics

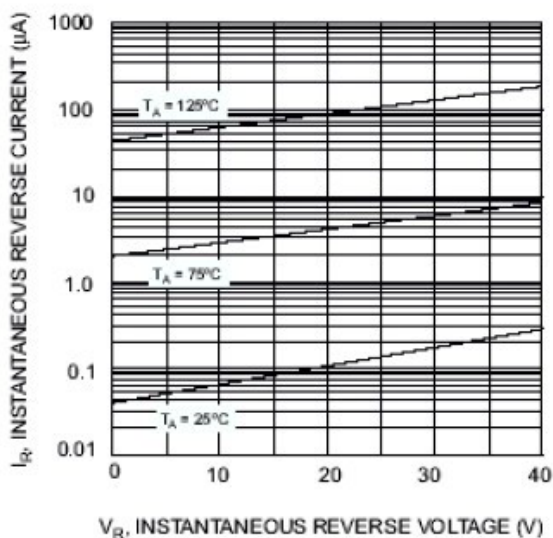


Fig. 3 Typical Reverse Characteristics

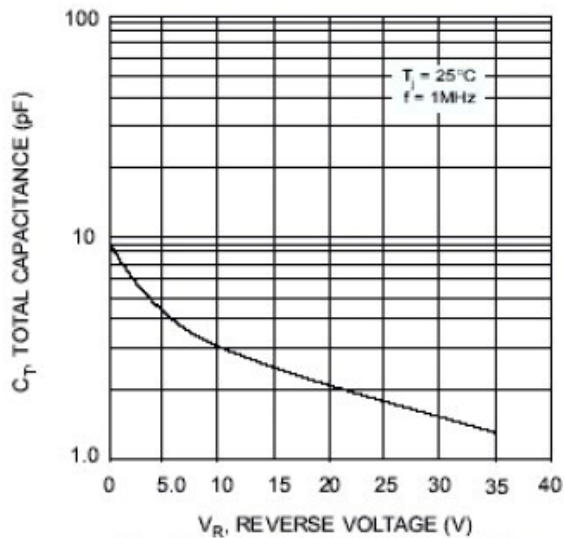
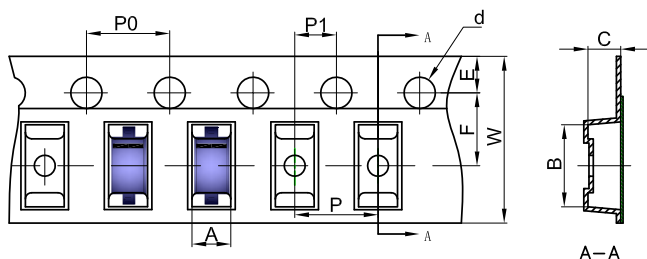


Fig. 4 Total Capacitance vs. Reverse Voltage

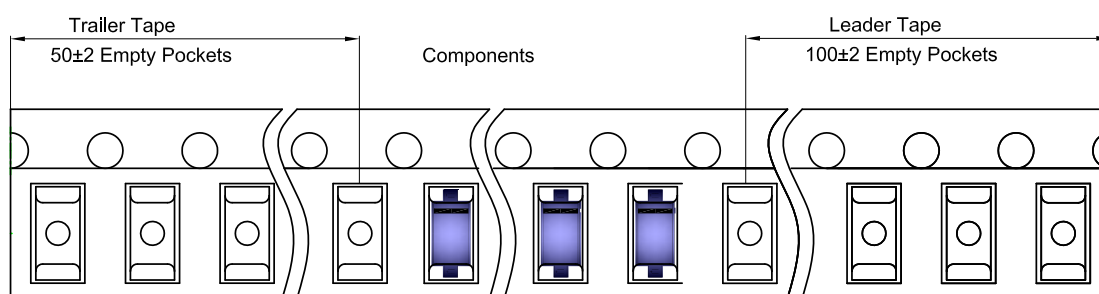
SOD-123 Tape and Reel

SOD-123 Embossed Carrier Tape

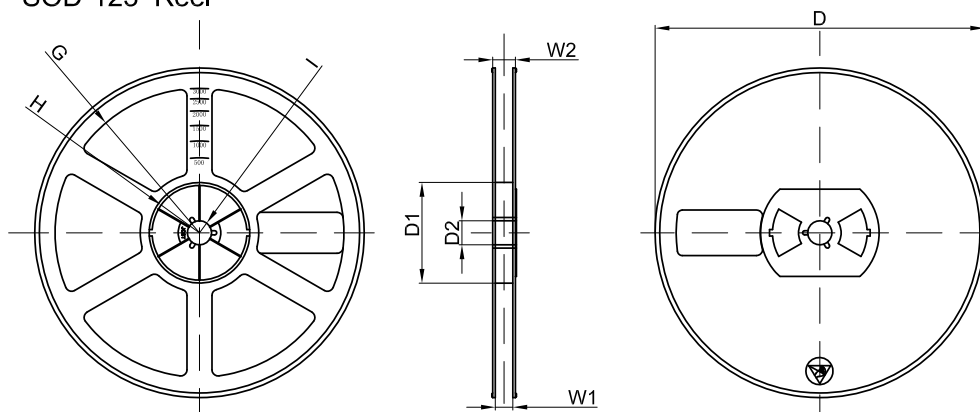


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.95	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00

SOD-123 Tape Leader and Trailer

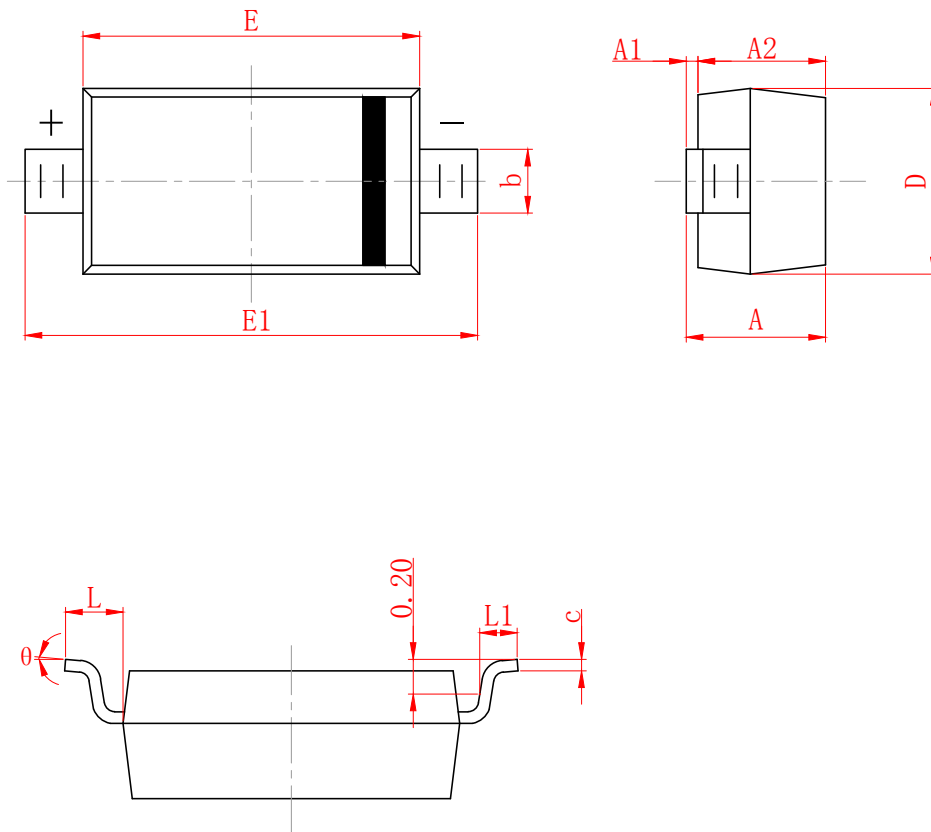


SOD-123 Reel



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°

DISCLAIMER

JHG PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATASHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with JHG products. You are solely responsible for

- (1) selecting the appropriate JHG products for your application;
- (2) designing, validating and testing your application;
- (3) ensuring your application meets applicable standards, and any other safety, security, or other requirements.

These resources are subject to change without notice. JHG grants you permission to use these resources only for development of an application that uses the JHG products described in the resource. Other reproduction and display of these resources are prohibited. No license is granted to any other JHG intellectual property right or to any third party intellectual property right. JHG disclaims responsibility for, and you will fully indemnify JHG and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.