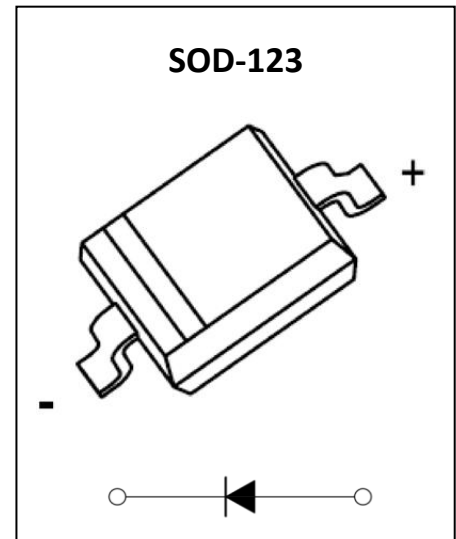


1N4448W Fast Switching Diodes
Feature

- V_R 75V
- I_{FAV} 250mA

Application

- Extreme fast switches

MARKING:

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

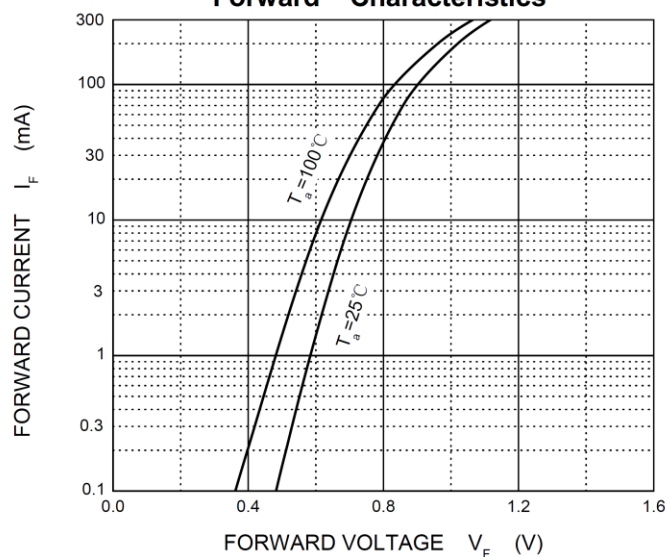
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Average rectified output current	I_O	0.25	A
Forward continuous current	I_{FM}	0.50	A
Non-repetitive Peak Forward Surge Current @ $t=1\text{ us}$	I_{FSM}	4	A
Power Dissipation	P_D	0.5	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

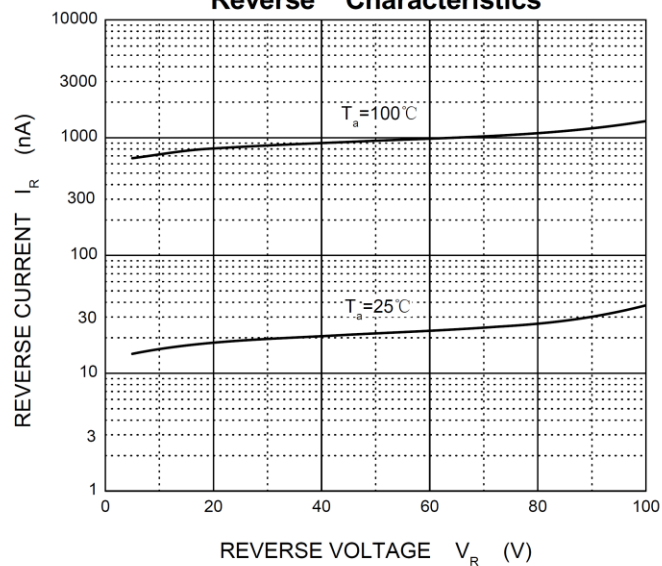
Parameter	Symbol	Test Condition	Min	Max	Unit
Forward voltage	V_F	$I_F=1\text{mA}$		0.715	V
		$I_F=10\text{mA}$		0.855	V
		$I_F=50\text{mA}$		1.0	V
		$I_F=150\text{mA}$		1.25	V
Reverse current	I_R	$V_R=20\text{V}$		25	nA
		$V_R=75\text{V}$		2.5	μA
Diode capacitance	C_D	$V_R=0\text{V}$, $f=1\text{MHz}$		4	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1 \cdot I_R$, $R_L=100\Omega$		4	ns

Typical Electrical and Thermal Characteristics

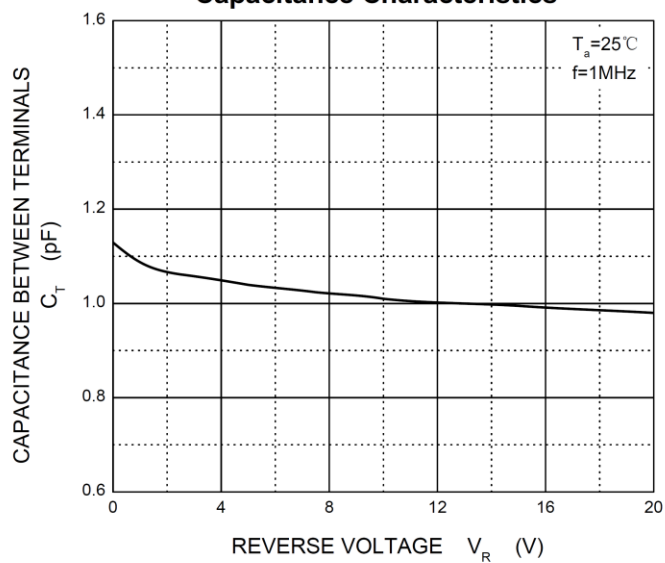
Forward Characteristics



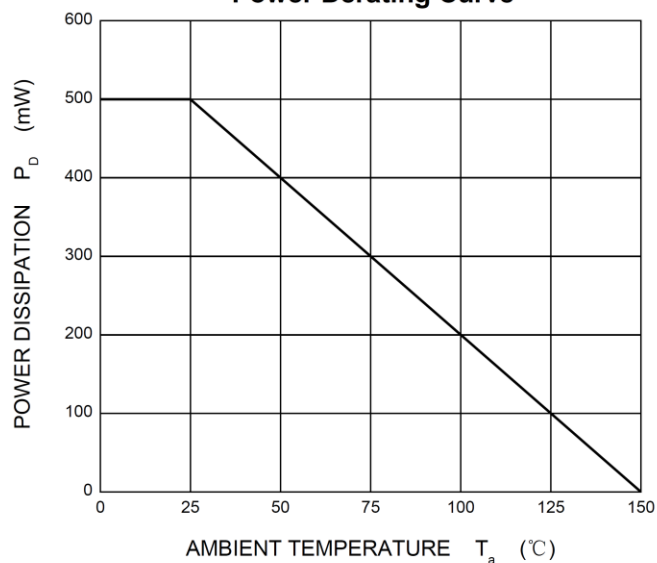
Reverse Characteristics

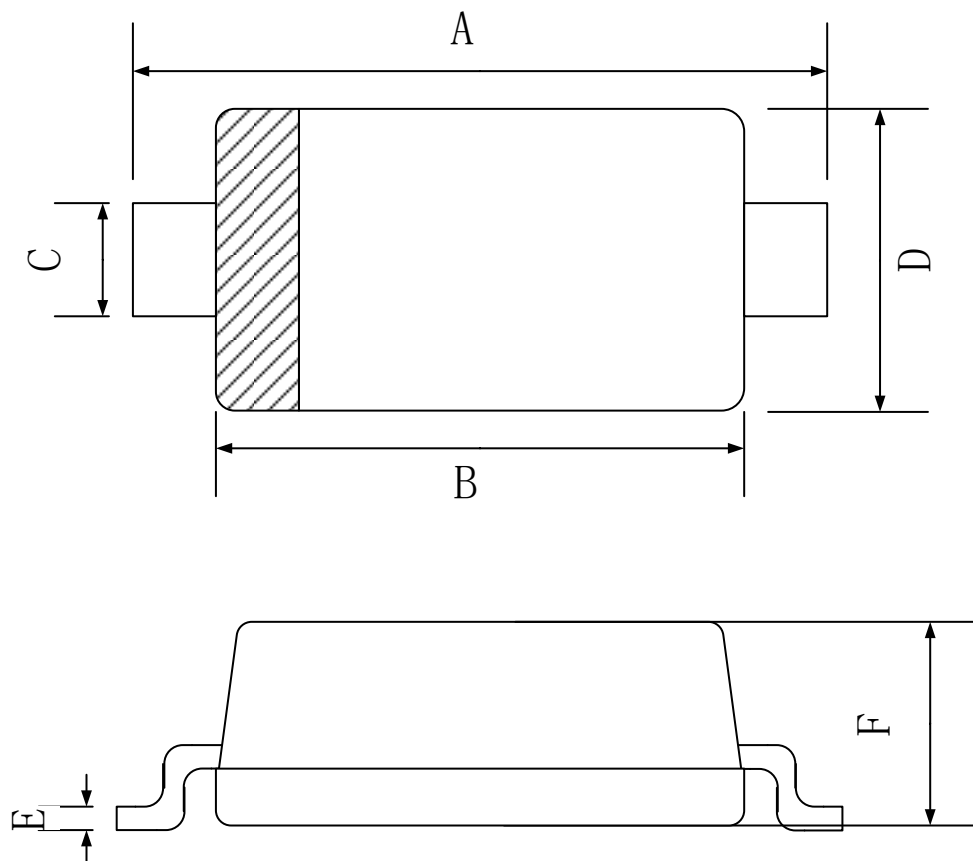


Capacitance Characteristics



Power Derating Curve

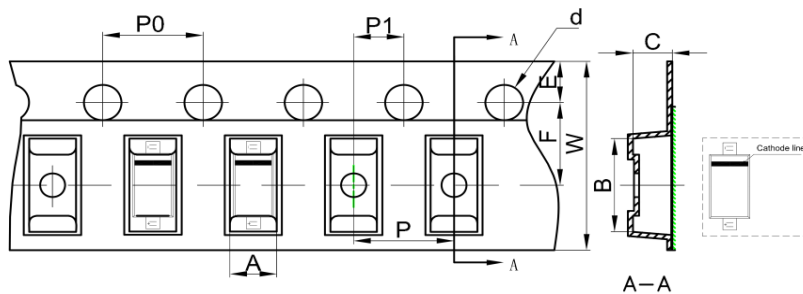


SOD-123 Package Outline Dimensions


Symbol	Dimensions In Millimeters		
	Min.	Typ.	Max.
A	3.45	3.65	3.85
B	2.55	2.65	2.75
C	0.45	0.55	0.65
D	1.50	1.60	1.70
E	0.09	0.105	0.12
F	0.95	1.15	1.35

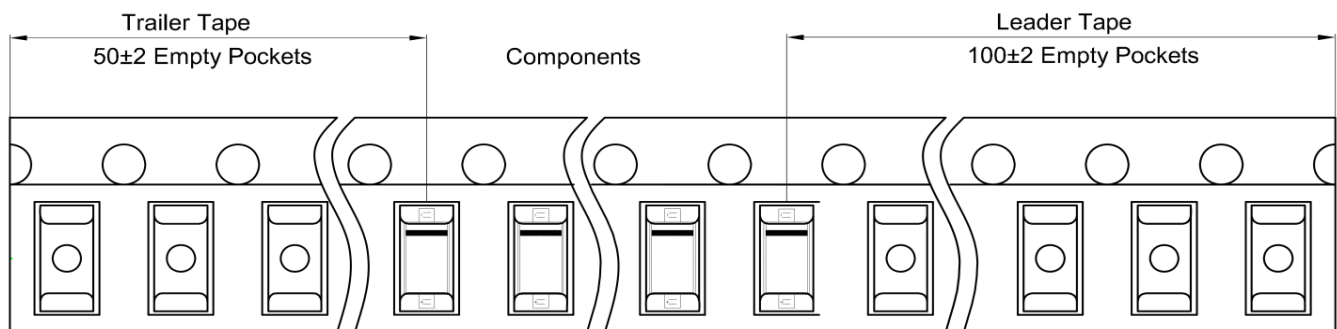
SOD-123 Package Outline Dimensions

SOD-123 Embossed Carrier Tape

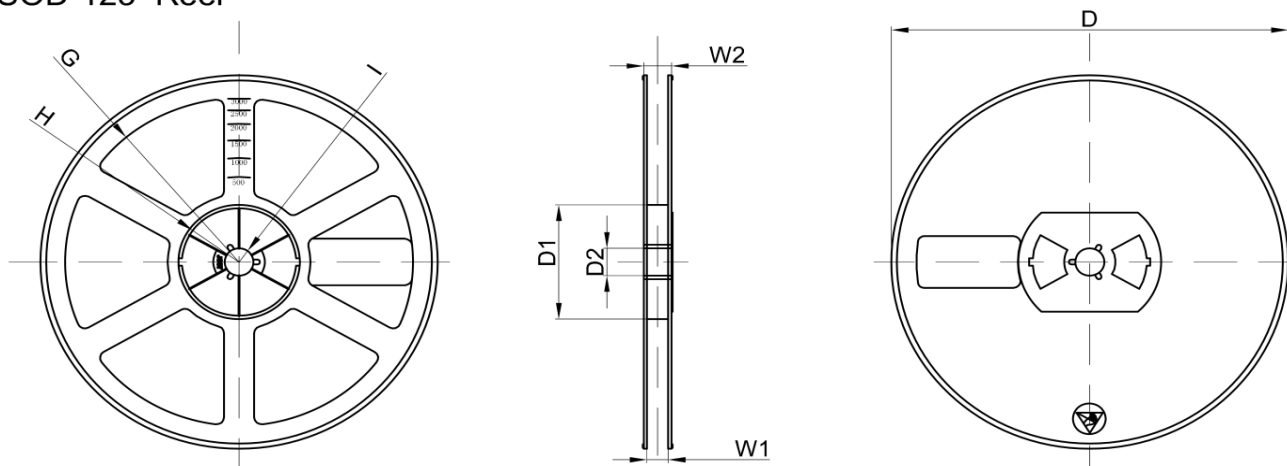


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-123	1.85	3.94	1.57	Ø1.55	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

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	