



1N4148W/BAV16W

Fast Switching Diodes

FEATURES

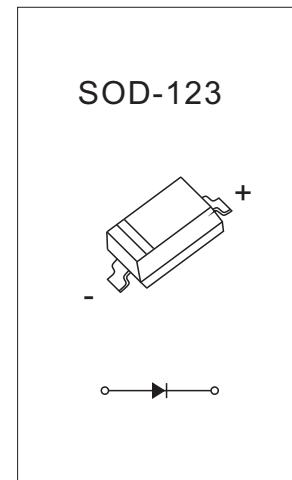
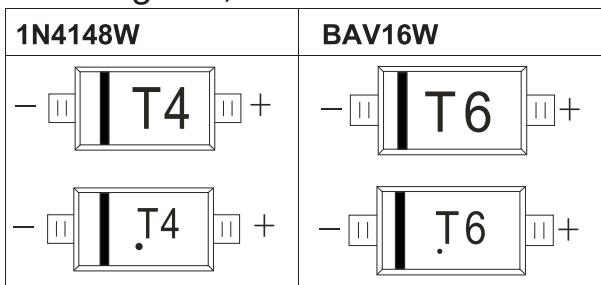
Fast switching speed

Surface mount package ideally suited for automatic insertion

For general purpose switching applications

High conductance

Marking: T4, T6



The marking bar indicates the cathode.

Solid dot = Green molding compound device, if none, the normal device.

MAXIMUM RATINGS(Ta=25°C)

Symbol	Parameter	Value	Unit
VRM	Non-Repetitive peak reverse voltage	100	V
VRRM	Peak repetitive peak reverse voltage		
VRWM	Working peak	100	V
VR	DC blocking voltage		
VR(RMS)	RMS reverse voltage	71	V
IFM	Forward continuous current	300	mA
IO	Average rectified output current	150	mA
IFSM	Non-repetitive Peak forward surge current @8.3mS	2	A
PD	Power dissipation 1N4148W BAV16W	350	mW
		400	
R _{θJA}	Thermal Resistance Form Junction to Ambient	250	°C/W
T _J	Junction Temperature	150	°C
T _{STG}	Storage Temperature Range	-55~+150	°C



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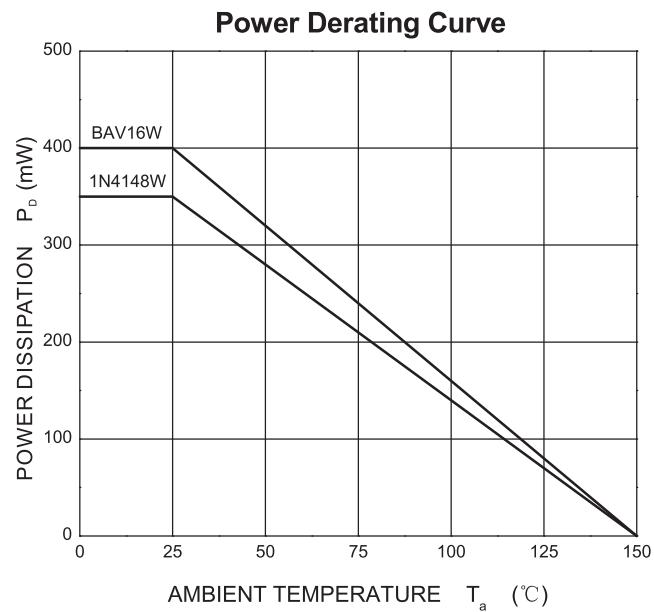
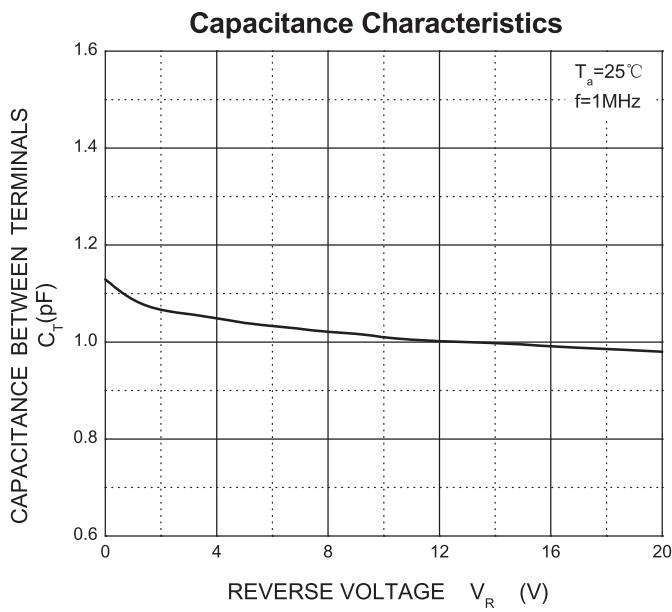
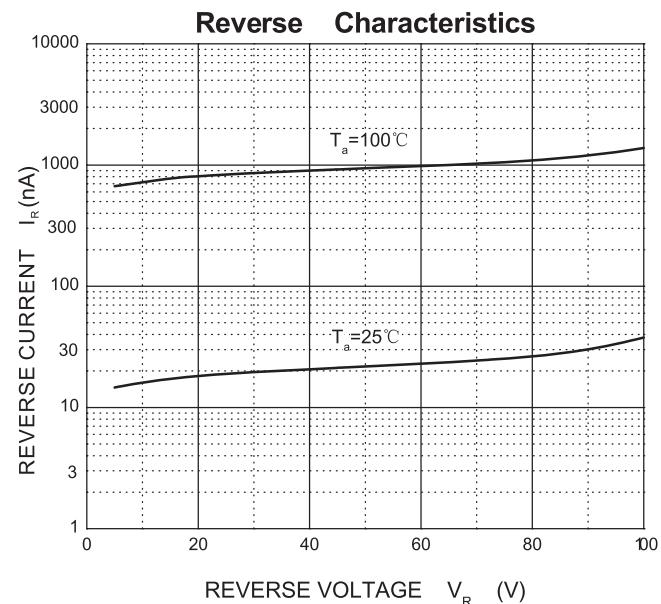
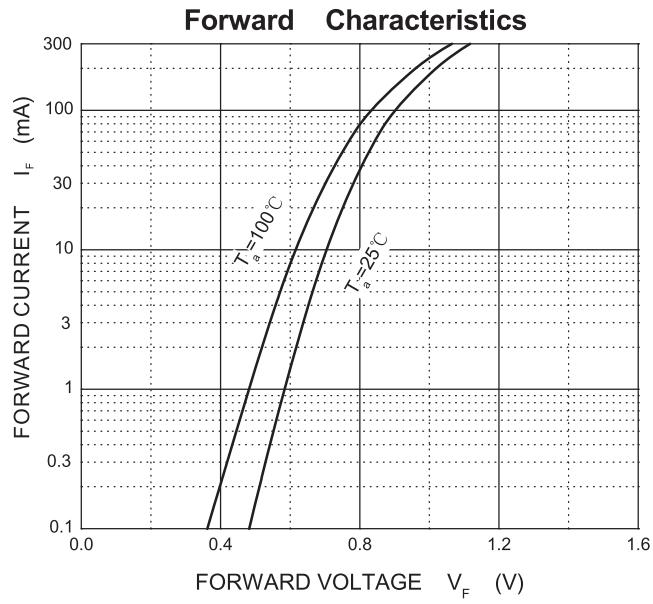
ELECTRICAL CHARACTERISTICS(Ta=25°C)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Units
Forward voltage	V _{F1}	I _{F1} =1.0mA			0.715	V
	V _{F2}	I _{F2} =10mA			0.855	V
	V _{F3}	I _{F3} =50mA			1.0	V
	V _{F4}	I _{F4} =150mA			1.25	V
Reverse current	I _{R1}	V _R =75V			1	uA
	I _{R2}	V _R =20V			25	nA
Capacitance between terminals	C _T	V _R =0V,f=1.0MHz			2	pF
Reverse recovery time	T _{rr}	I _f =I _R =10mA,I _{rr} =0.1X I _R , RL=100Ω			4	ns



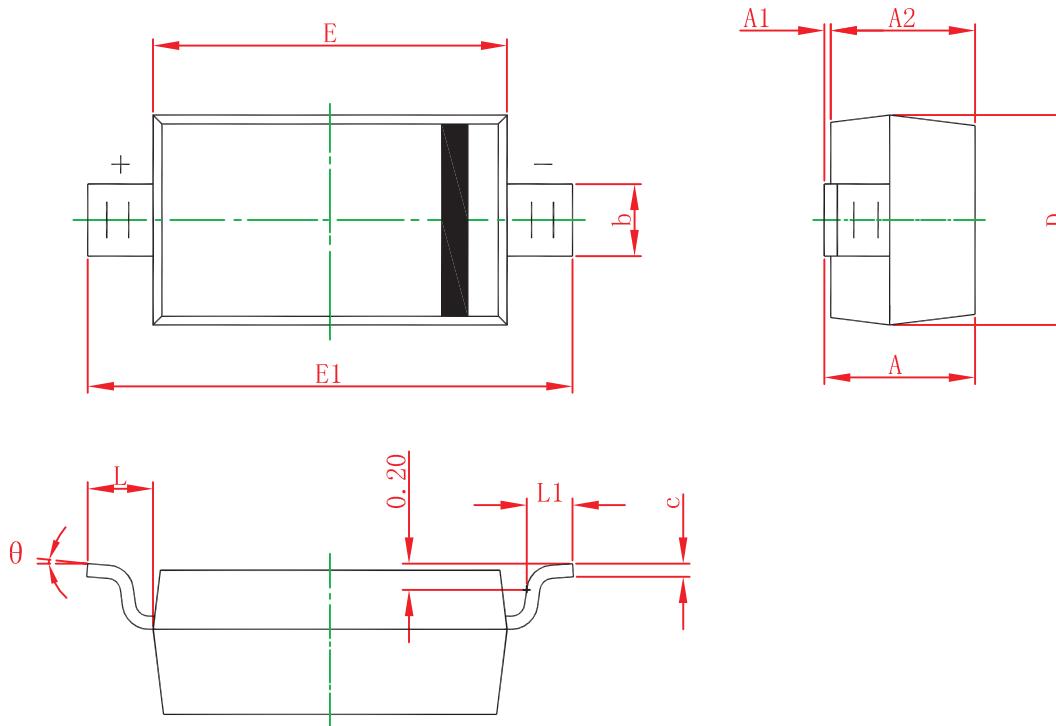
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TYPICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)





SOD-123 Package Outline Demensions

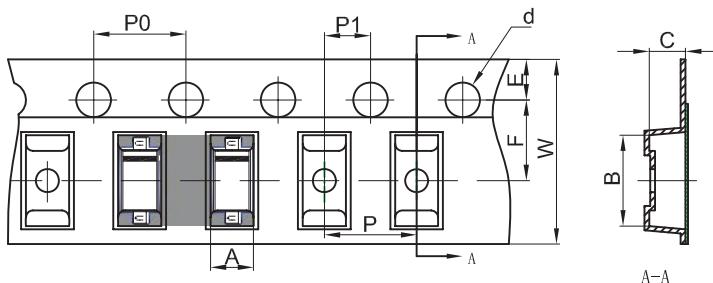


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF.		0.020 REF.	
L1	0.250	0.450	0.010	0.018
θ	0?	8?	0?	8?



SOD-123 Tape and reel

SOD-123 Embossed Carrier Tape



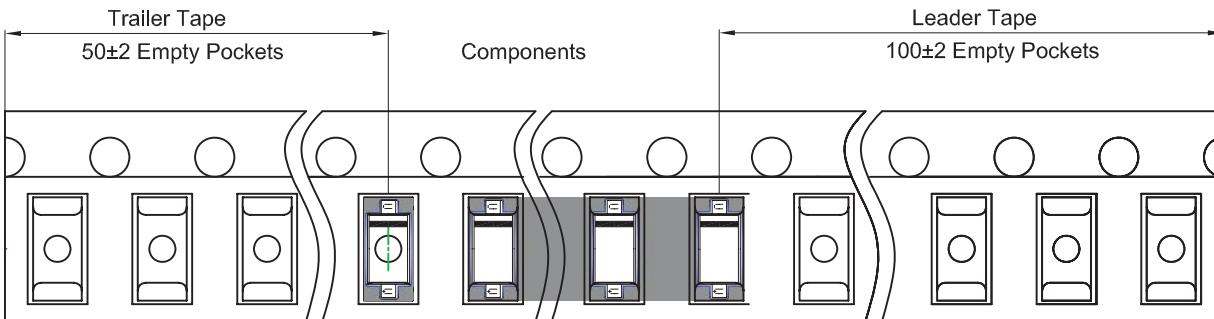
Packaging Description:

SOD-123 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

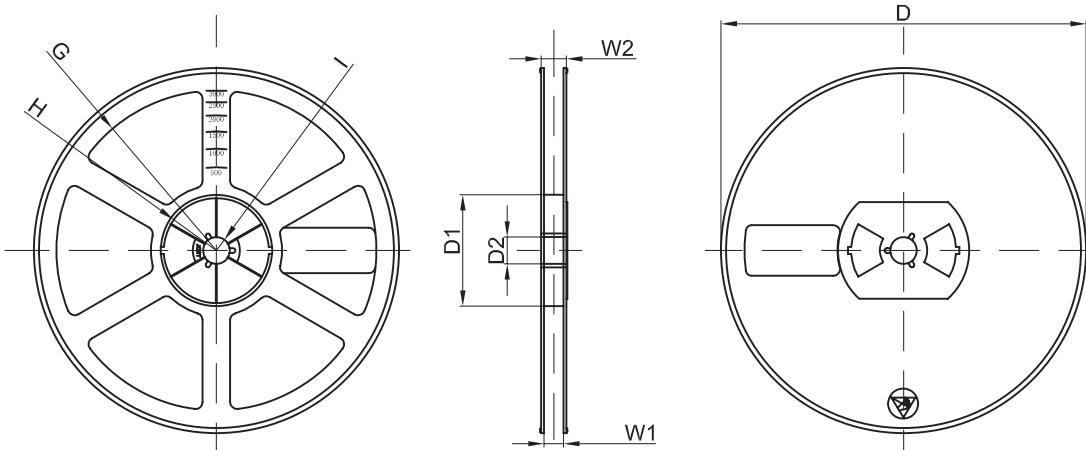
Dimensions are in millimeter

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

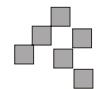


Dimensions are in millimeter

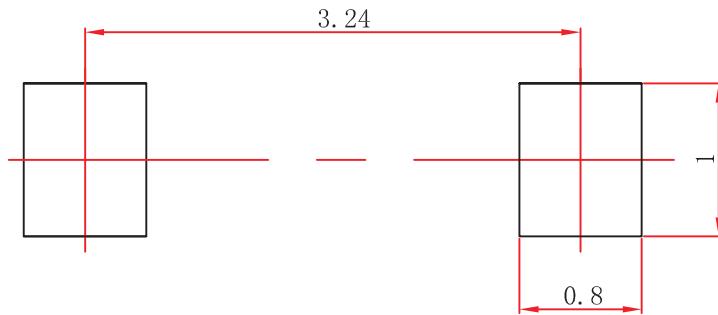
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

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	





SOD-123 Suggested Pad size



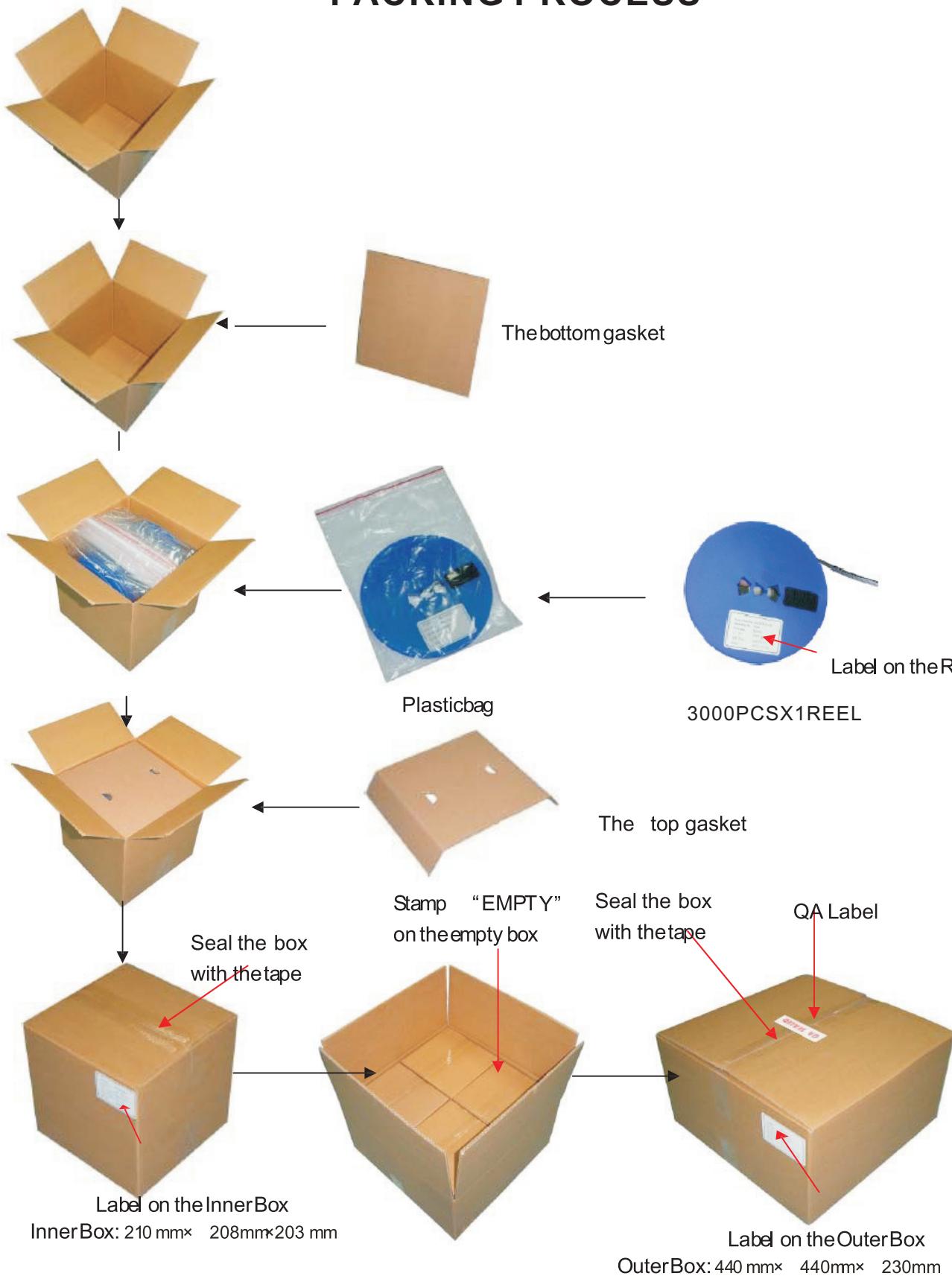
中心距: 3.24
脚宽: 0.55
焊盘宽: 1
脚长: 0.50
焊盘长: 0.80

技术要求

1. 塑封体尺寸 2.70×1.60 ;
2. 未注公差为: ± 0.05 ;
3. 所有单位为: mm。

Unit: mm

ZOHE ELECTRONIC TECHNOLOGY PACKING PROCESS



Semiconductor



LEAD FREE
ROHS
COMPLIANT

QUALITY
CERTIFICATION
ISO9001: ISO14001
SGS