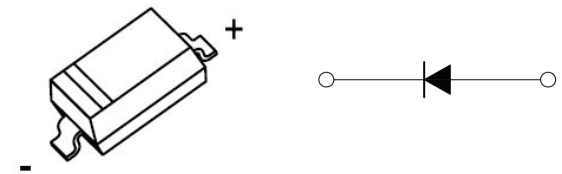
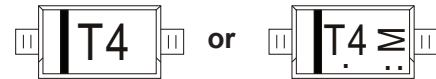
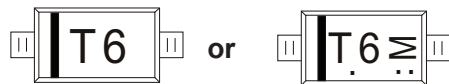


Plastic-Encapsulate Fast Switching Diodes

PRIMARY CHARACTERISTICS		
1N4148W	P_D	350mW
BAV16W	P_D	400mW
	V_{RRM}	100V
	I_O	150mA
	$V_F@I_F=50mA$ Max	1.0V
	$T_{J\ MAX}$	150°C

SOD-123
PACKAGE

1N4148W
MARKING: T4

T4 : Device Code -- fixed
M : Data Code -- Change in Month
BAV16W
MARKING: T6

T6 : Device Code -- fixed
M : Data Code -- Change in Month
FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case: Molded Glass SOD-123
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: See diagram above
- Mounting Position: Any

Maximum Ratings and Electrical Characteristics, Single Diode @ $T_a=25^\circ\text{C}$

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	71	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3ms$	I_{FSM}	2.0	A
Power Dissipation	P_d	350	mW
		400	
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

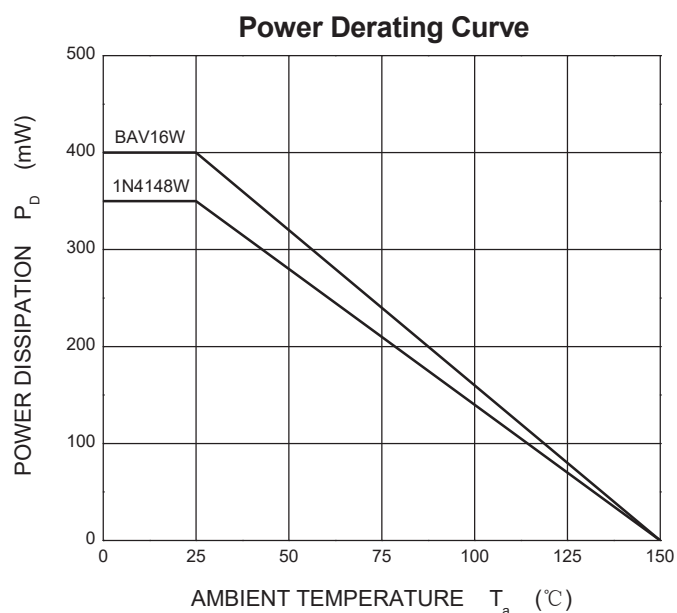
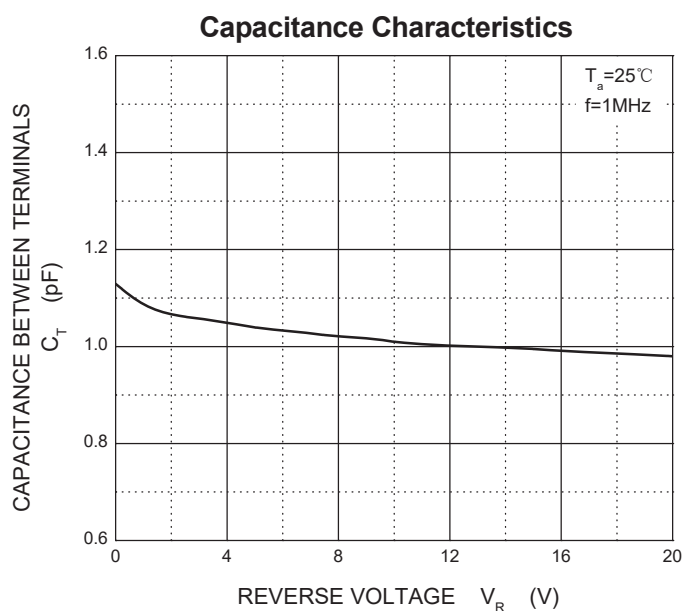
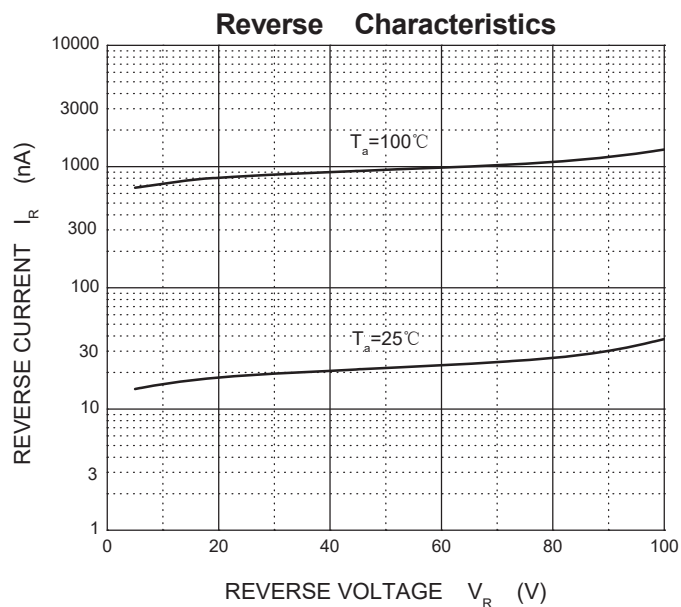
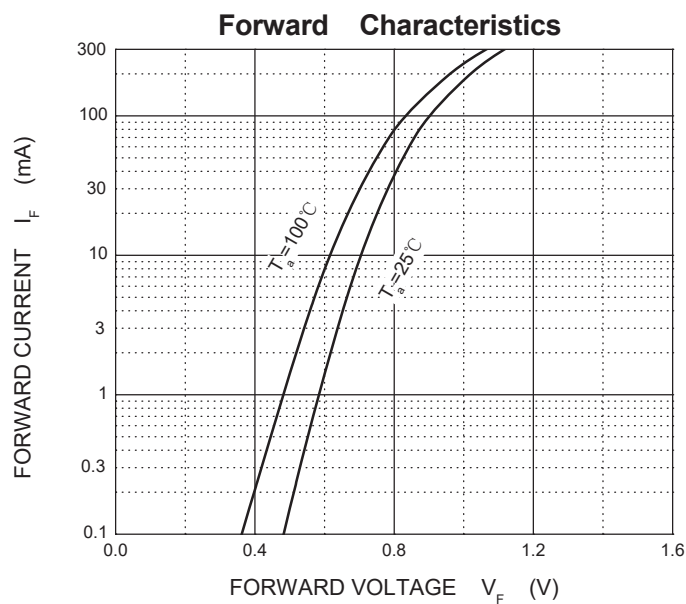


Plastic-Encapsulate Fast Switching Diodes

Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}			0.715	V	$I_F=1\text{mA}$
	V_{F2}			0.855	V	$I_F=10\text{mA}$
	V_{F3}			1.0	V	$I_F=50\text{mA}$
	V_{F4}			1.25	V	$I_F=150\text{mA}$
Reverse current	I_{R1}			1	μA	$V_R=75\text{V}$
	I_{R2}			25	nA	$V_R=20\text{V}$
Capacitance between terminals	C_T			2	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			4	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

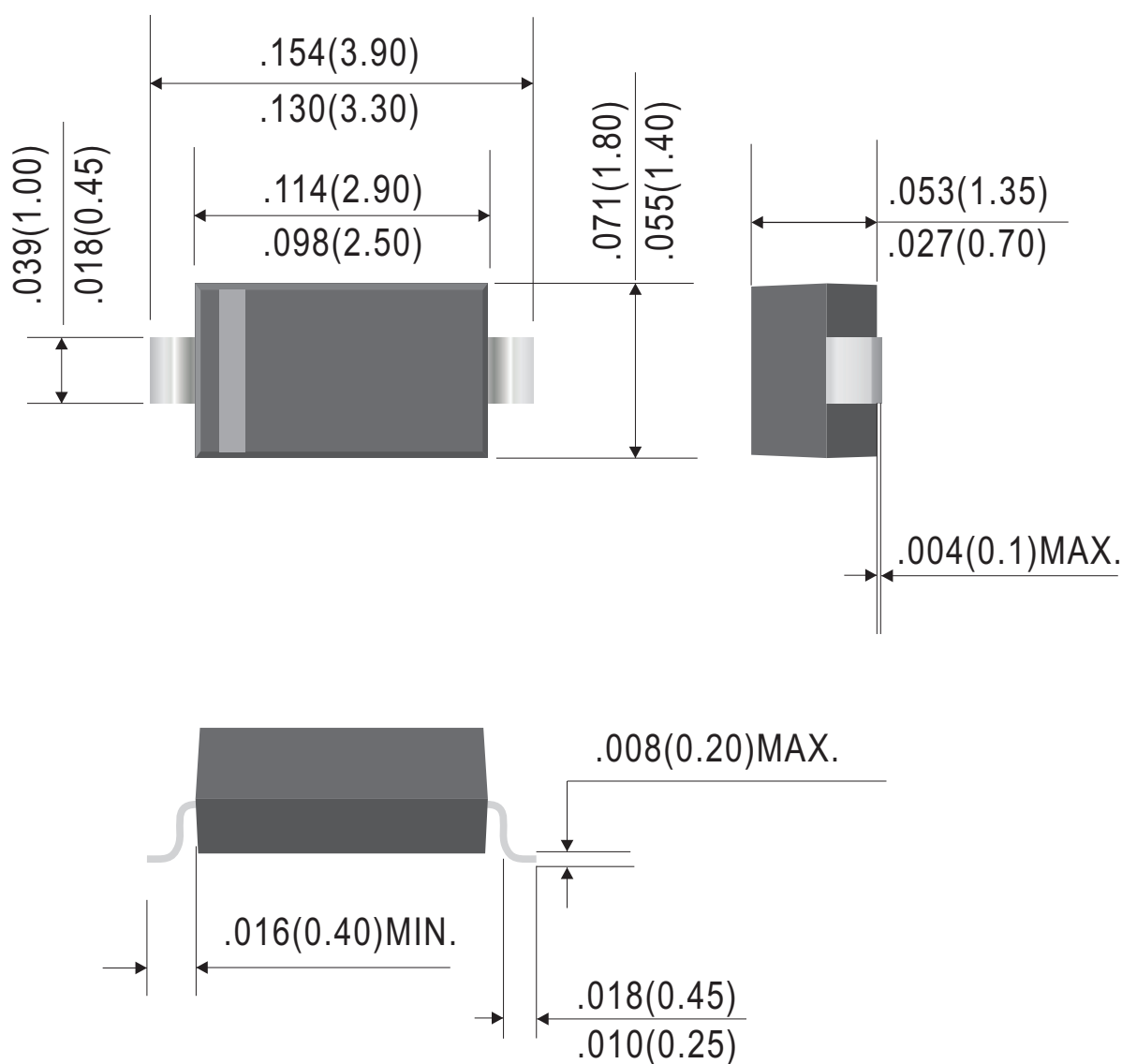
Typical Characteristics





Outline Drawing

SOD-123



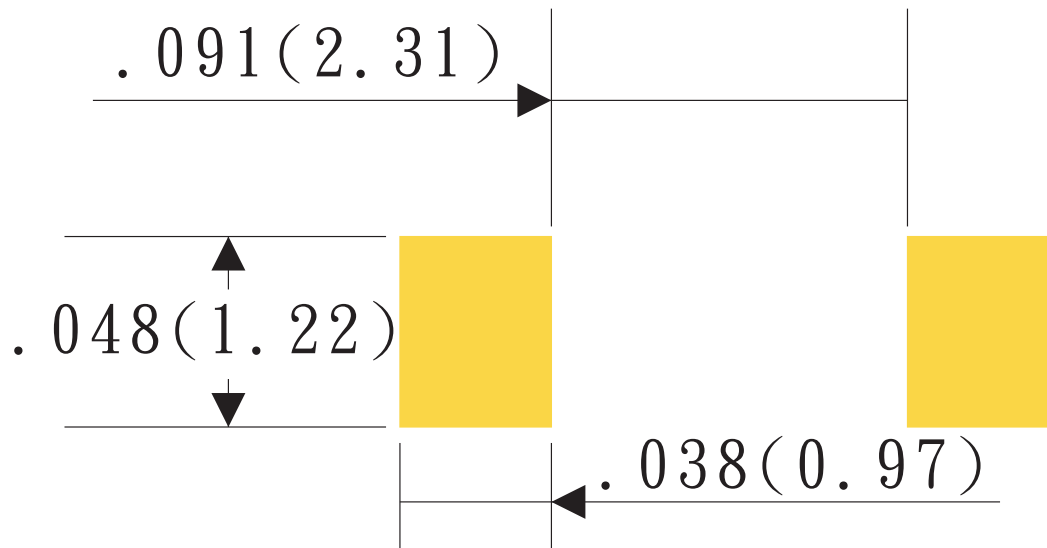
Dimensions in inches and (millimeters)

Rev.D



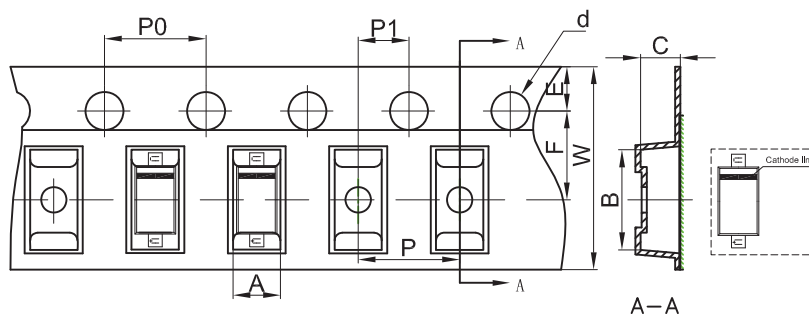
Suggested Soldering Pad Layout

SOD-123

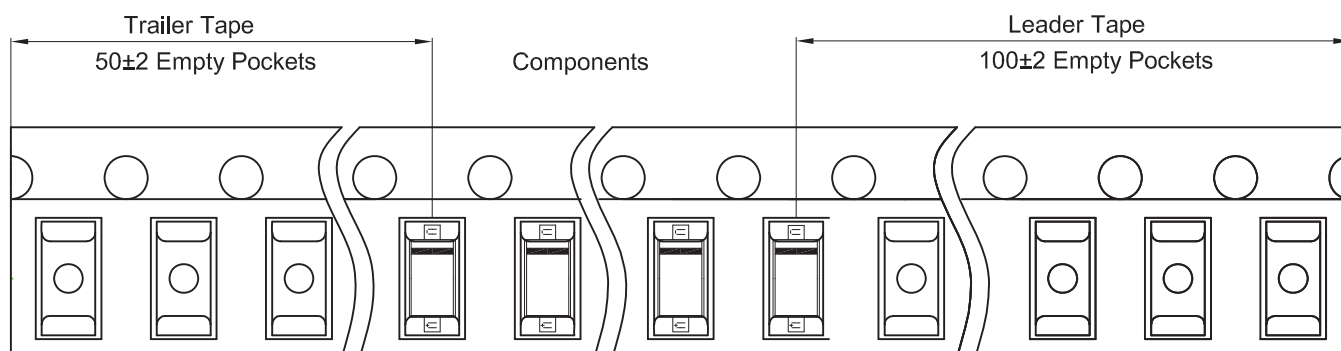
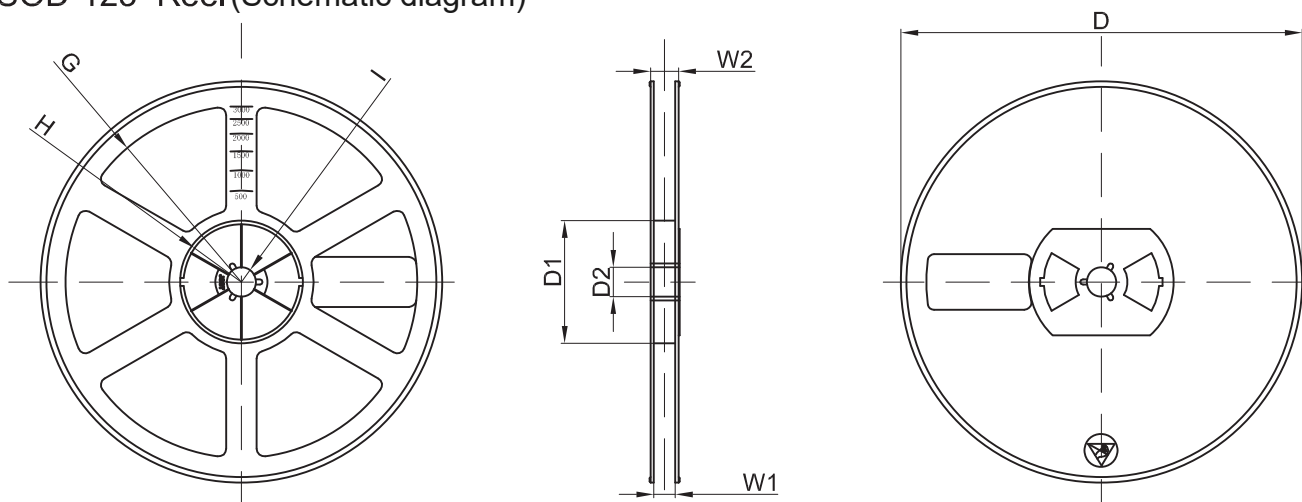


Dimensions in inches and (millimeters)

RevA

Plastic-Encapsulate Fast Switching Diodes
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 (Schematic diagram)


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

Ordering Information:

Device PN	Marking ⁽⁴⁾	Packing
1N4148W-T ⁽¹⁾ -H ⁽²⁾ -WS ⁽³⁾	T4	Tape&Reel: 3 Kpcs/Reel
BAV16W-T ⁽¹⁾ -H ⁽²⁾ -WS ⁽³⁾	T6	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

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