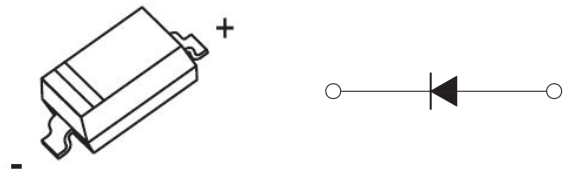


Plastic-Encapsulate Fast Switching Diodes
PRIMARY CHARACTERISTICS

P_D	410mW
V_{RRM}	100V.150V.200V
I_O	200mA
$V_F@I_F=200mA$ Max	1.25V
$T_{J\ MAX}$	150°C

SOD-123
PACKAGE

FEATURES

- General purpose diodes
- Fast switching devices
- RoHS compliant / Green EMC
- Matte Tin (Sn) Lead finish

MECHANICAL DATA

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

Maximum Ratings (Ta = 25 °C)

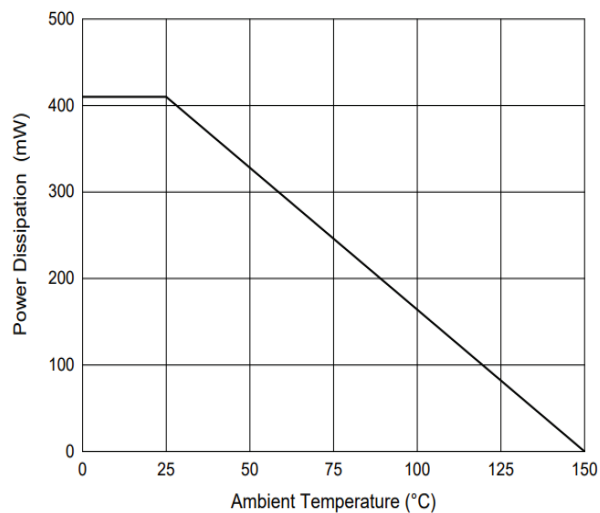
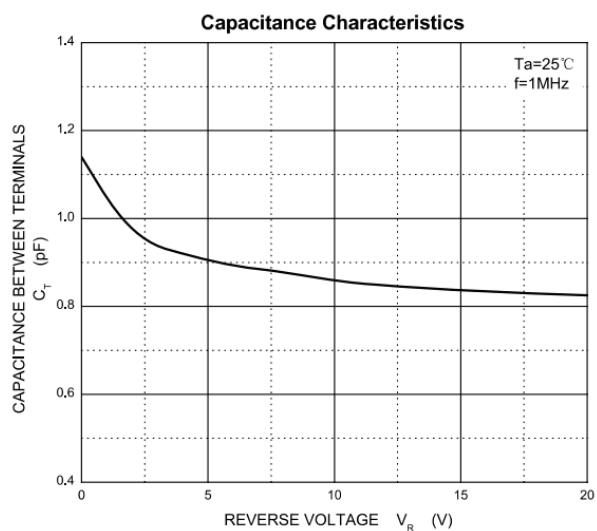
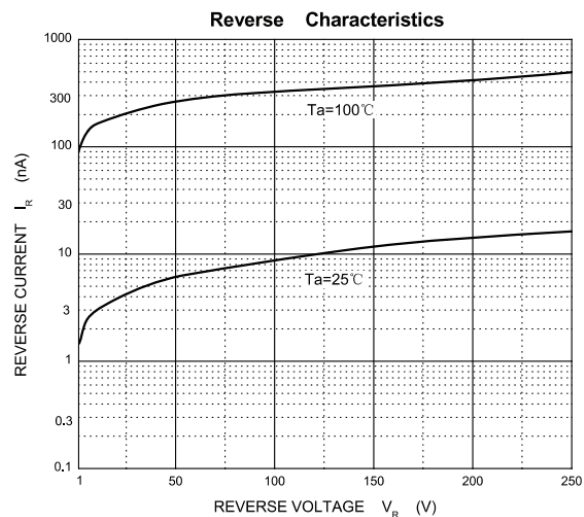
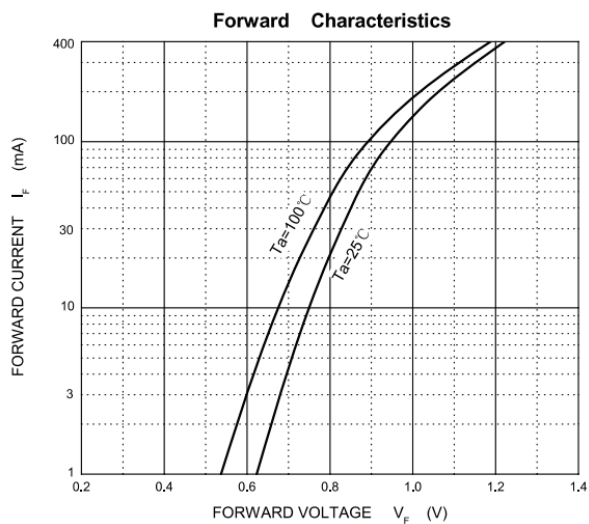
Symbol	Parameter	BAV19W	BAV20W	BAV21W	Units
Marking		A8	T2	T3	
V_{RM}	Non-Repetitive Peak Reverse Voltage	120	200	250	V
V_{RRM}	Repetitive Peak Reverse Voltage	100	150	200	V
$V_{R(RMS)}$	RMS Reverse Voltage	71	106	141	V
I_O	Average Rectified Output Current	200			mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current (@t=1.0 us)	4.0			A
P_D	Power Dissipation	410			mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	305			°C/W
T_J	Junction Temperature	150			°C
T_{STG}	Storage Temperature	-65 to +150			°C

Electrical Characteristics (Ta = 25 °C)

Symbol	Parameter	Test Conditions		Min	Max	Units
V_F	Forward Voltage	$I_F=100mA$ $I_F=200mA$			1 1.25	V
I_R	Reverse current	$V_R=100V$ $V_R=150V$ $V_R=200V$	BAV19W BAV20W BAV21W		0.1 0.1 0.1	μA
Ctot	Total capacitance	$V_R=0V, f=1MHz$			5	pF
trr	Reverse recovery time	$I_F=I_R=30mA, I_{rr}=0.1 \cdot I_R,$ $R_L=100\Omega$			50	ns



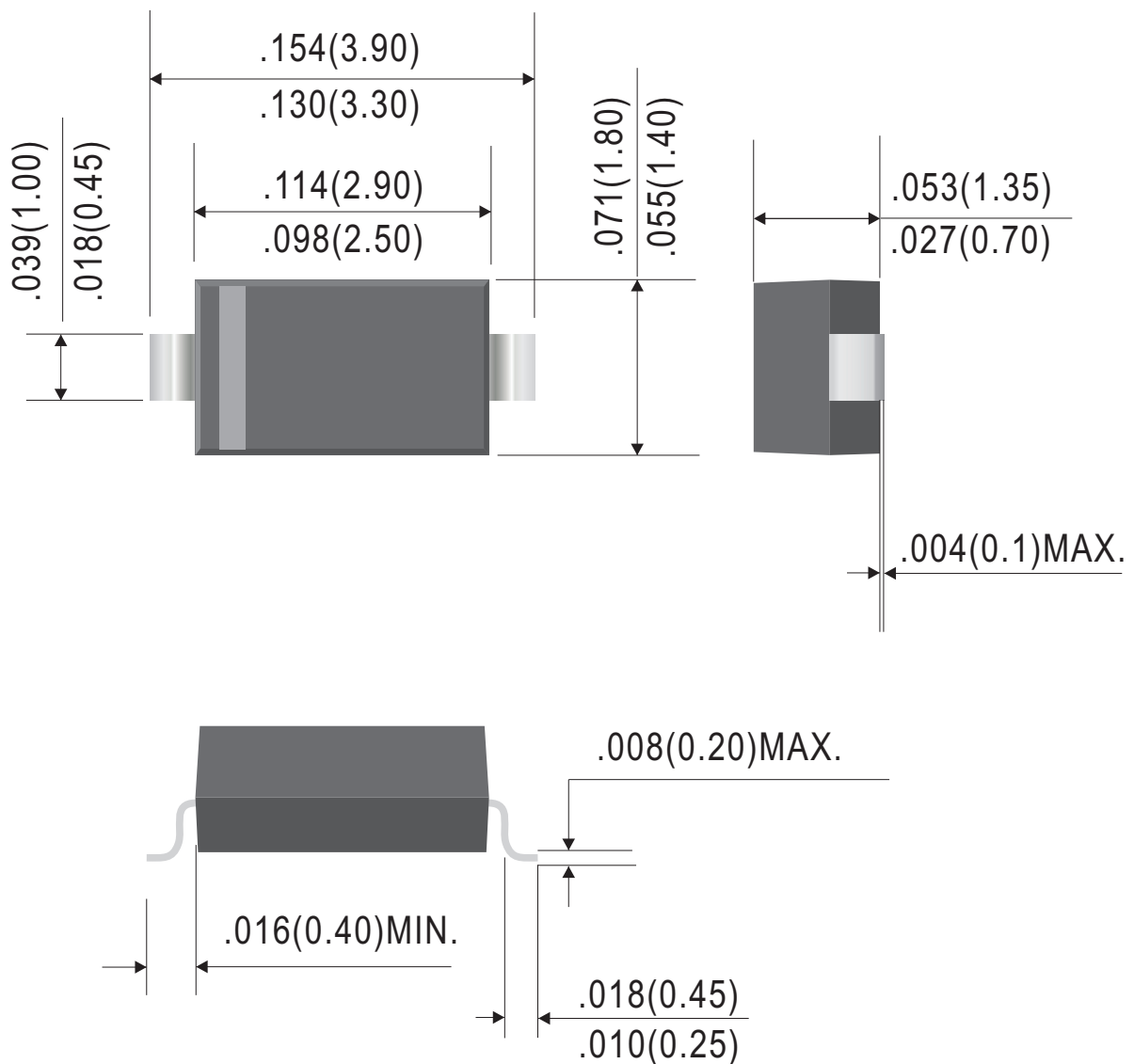
Characteristics curves





Outline Drawing

SOD-123



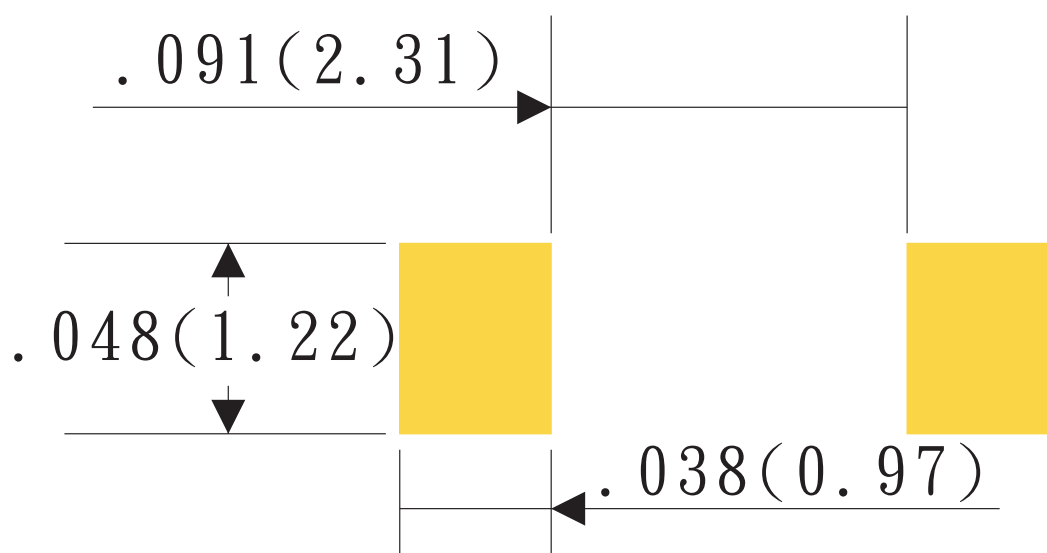
Dimensions in inches and (millimeters)

Rev.D



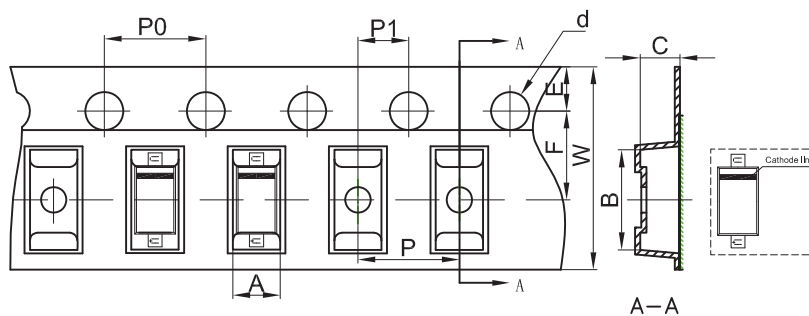
Suggested Soldering Pad Layout

SOD-123

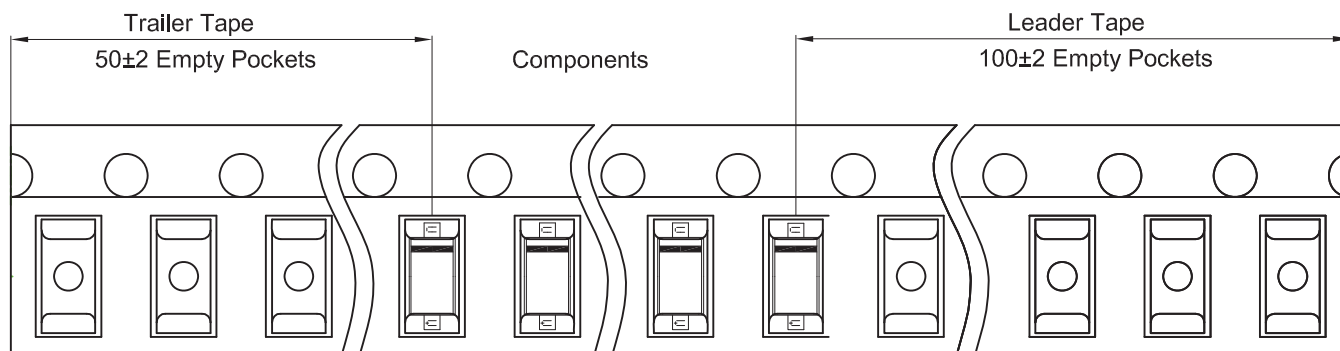
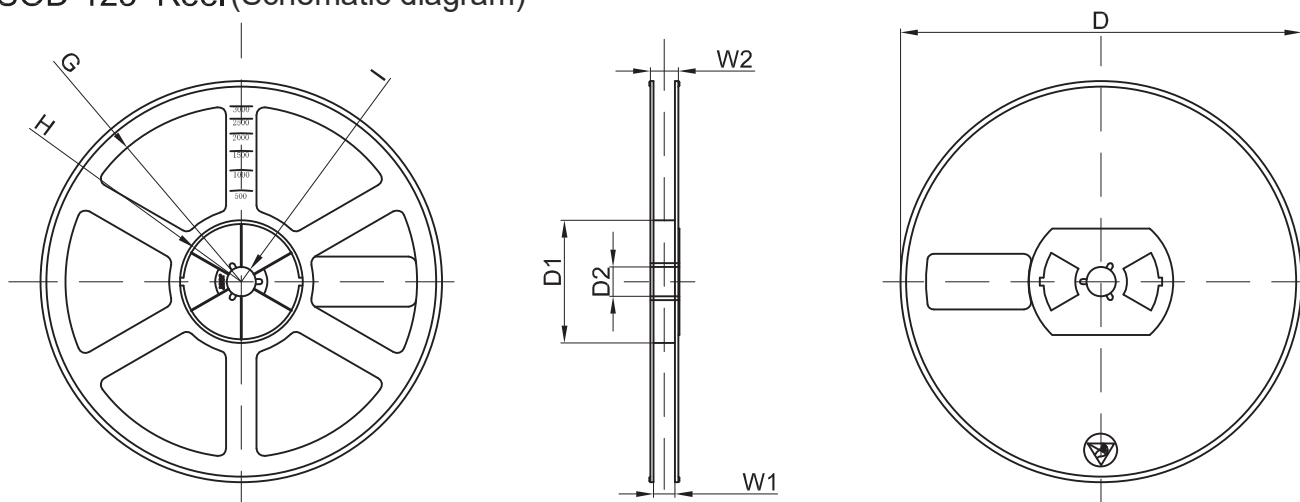


Dimensions in inches and (millimeters)

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
Part Number -T ⁽¹⁾ H ⁽²⁾ -WS ⁽³⁾	Refer to Page 2	Tape&Reel: 3 Kpcs/Reel

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

(2) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product.
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(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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