WILLAS

RoHS COMPLIANT

1N4148WS

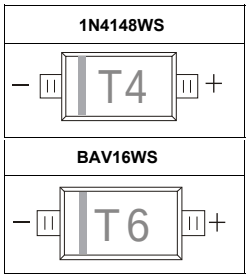
BAV16WS

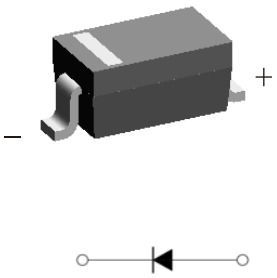
Plastic-Encapsulate Fast Switching Diodes

PRIMARY CHARACTERISTICS	
P_D	200mW
V_{RRM}	100V
I_O	150mA
V_F@I_F=50mA	1.0V
$T_{J,Max}$	150℃

SOD-323 PACKAGE

MARKING: T6,T4





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 plastic,SOD-323
- Polarity：As Above Marked
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

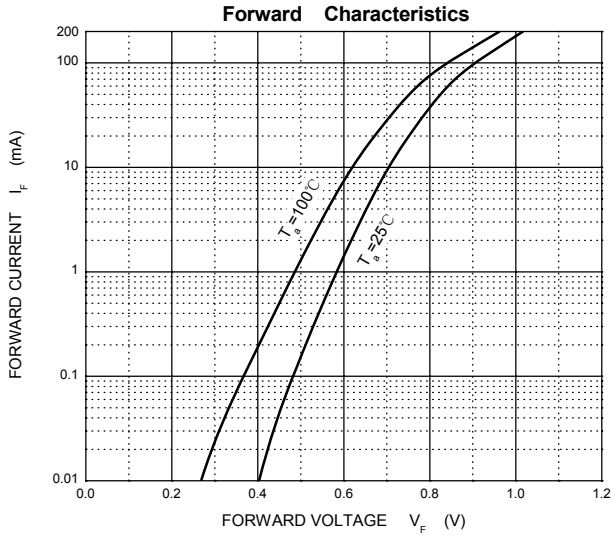
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25℃

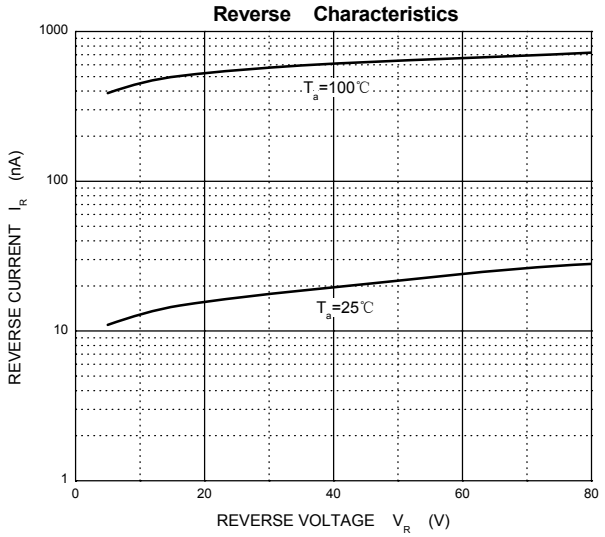
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	Pd	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	℃/W
Junction Temperature	T_j	150	℃
Operating/Storage Temperature	T_{STG}	-55~+150	℃

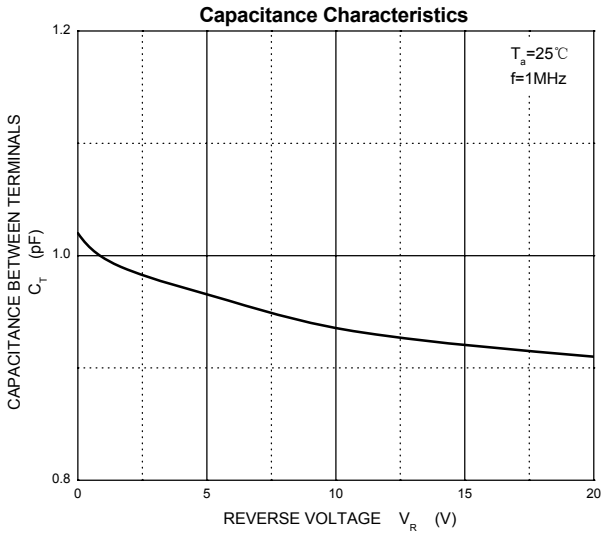
Electrical Ratings @Ta=25℃

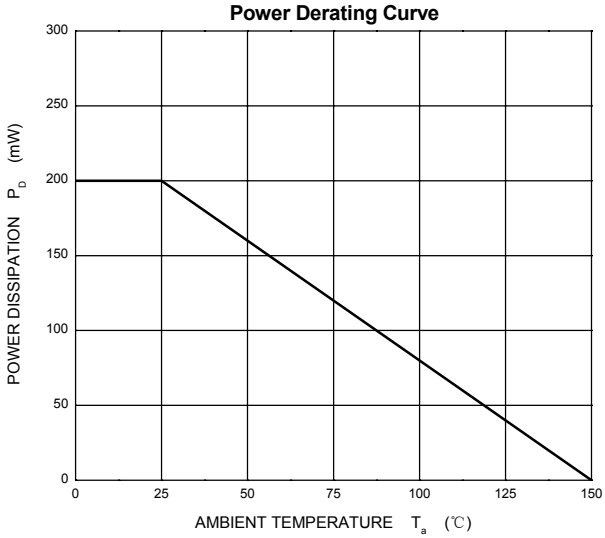
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}			0.715	V	I_F=1mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1.0	V	I_F=50mA
	V_{F4}			1.25	V	I_F=150mA
Reverse current	I_{R1}			1	μA	V_R=75V
	I_{R2}			25	nA	V_R=20V
Capacitance between terminals	C_T			2	pF	V_R=0V,f=1MHz
Reverse recovery time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

Typical Characteristics



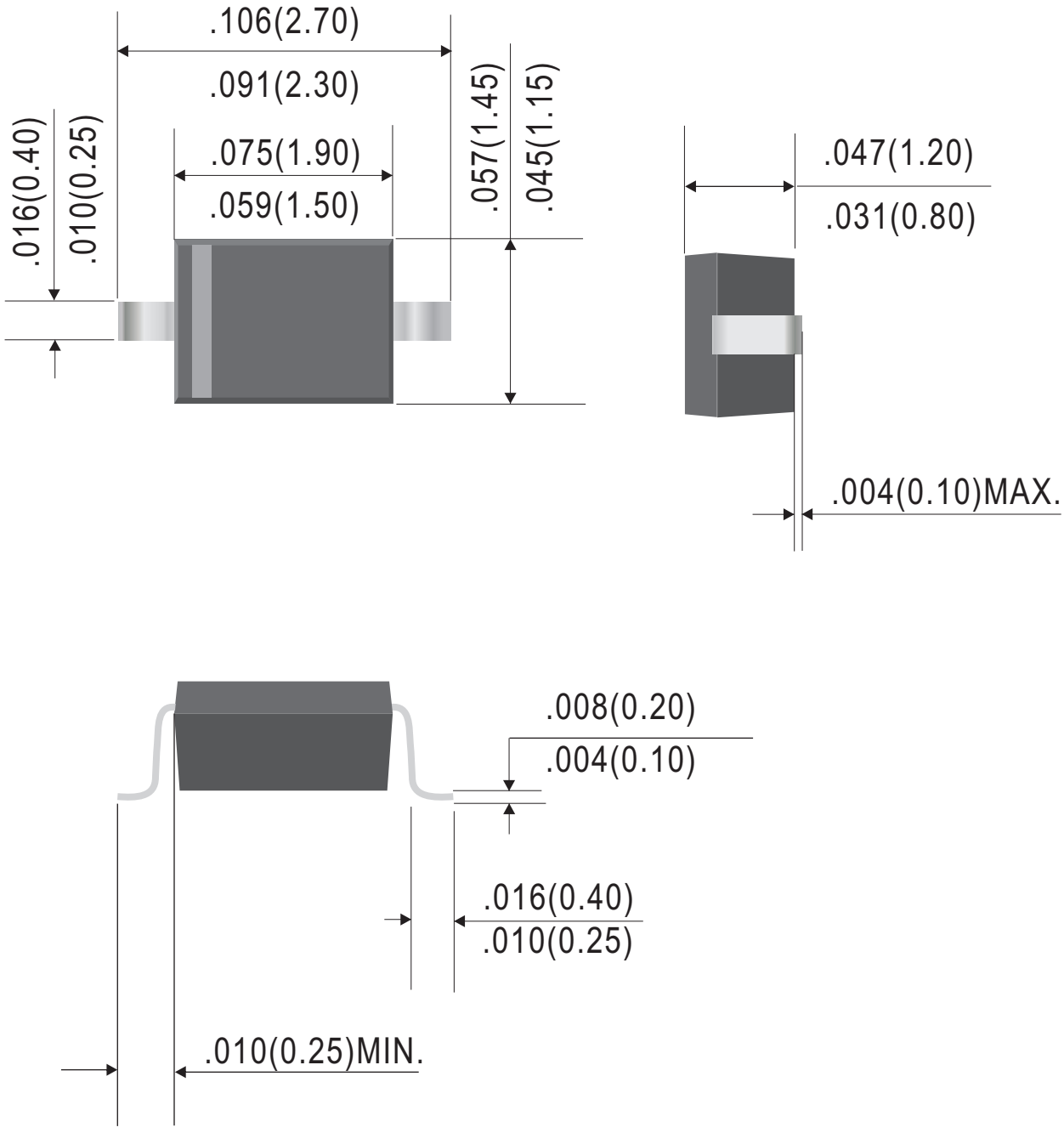






Outline Drawing

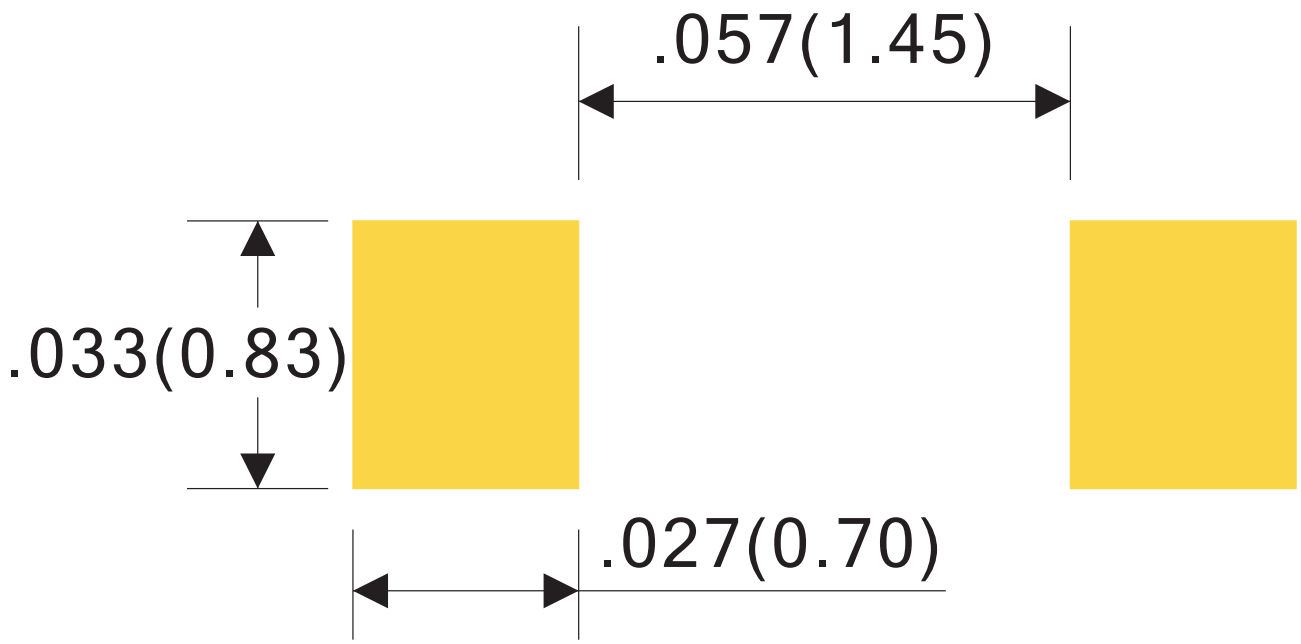
SOD-323



Dimensions in inches and (millimeters)

Rev.D

Suggested Soldering Pad Layout	SOD-323

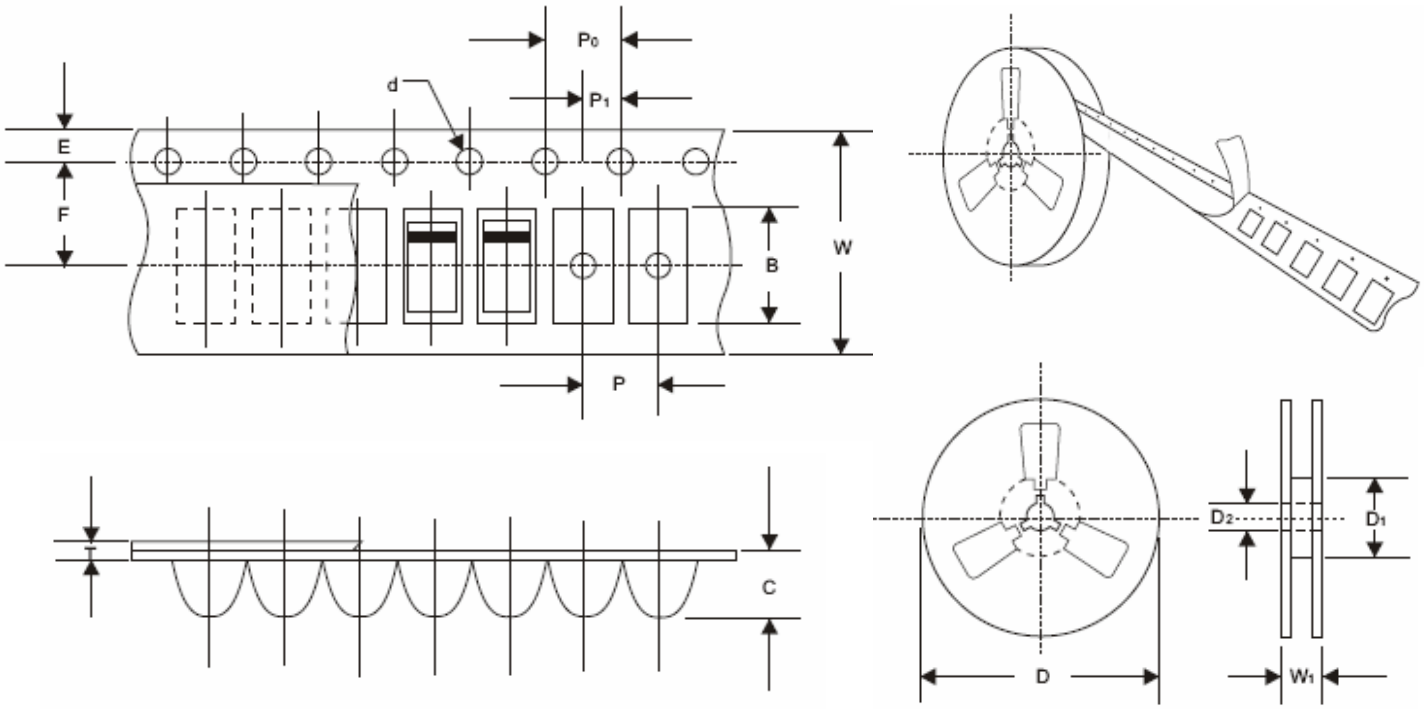


Dimensions in inches and (millimeters)

RevA

Reel Taping Specification - Surface Mount Device/SOD-323

PACKAGE	PER REEL EA	REEL DIA (m/m)	PER BOX EA	PER CARTION EA
SOD-323	3000	178	30000	240,000



ITEM	SYMBOL	SPECIFICATIONS(mm) SOD-323	SPECIFICATIONS(inch) SOD-323
Carrier length	B	4.5max.	0.177max.
Carrier depth	C	2.4max.	0.094max.
Sprocket hole	d	1.55±0.1	0.061±0.004
Reel outside diameter	D	178max.	7max.
Reel inner diameter	D_1	50min.	1.969min.
Feed hole diameter	D_2	13.0±0.2	0.512±0.008
Sprocket hole position	E	1.75±0.1	0.069±0.004
Punch hole position	F	3.5±0.05	0.1378±0.002
Punch hole pitch	P	4.0±0.1	0.157±0.004
Sprocket hole pitch	P_0	4.0±0.1	0.157±0.004
Embossment center	P_1	2.0±0.05	0.079±0.002
Overall tape thickness	T	0.4max.	0.016max.
Tape width	W	8.0±0.3	0.315±0.012
Reel width	W_1	14.4max.	0.567max.

Ordering Information:

Device PN	Packing
Part Number-T(1)G(2)-WS	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"