



1N4148WS, BAV16WS



Plastic-Encapsulate Diodes



SOD-323



Features
·Fast Switching Speed
·Surface Mount Package Ideally Suited for Automatic Insertion
·For General Purpose Switching Applications
·High Conductance
·Moisture Sensitivity Level 1
·Marking : T4,T6

Ordering Information		
Part No.	Package	Packing
1N4148WS, BAV16WS	SOD-323	3000 / Tape & Reel

Mechanical Data
·Case : Molded plastic,SOD-323
·Polarity : As Above Marked
·Terminals :Plated terminals,solderable per MIL-STD-750 Method 2026
·Moisture Sensitivity Level 1

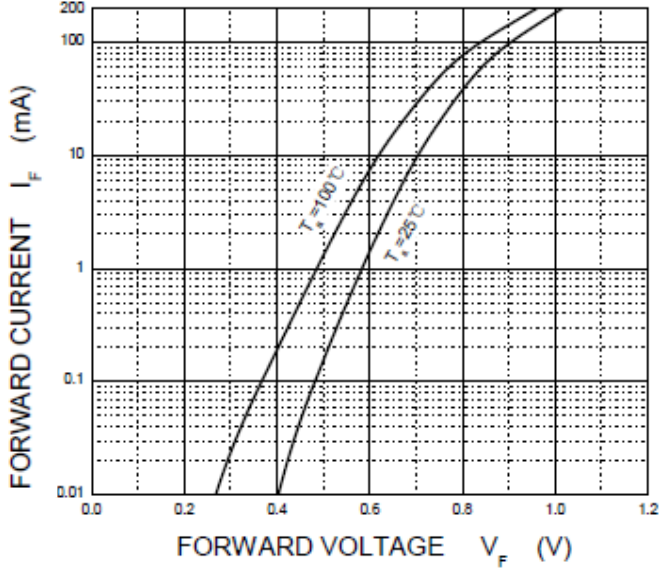
Maximum Ratings (T _A =25°C unless otherwise noted)			
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	71	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Peak Forward Surge Current @t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Junction Temperature	T _j	150	°C
Operating/Storage Temperature	T _{STG}	-55~+150	°C

Electrical Characteristics (T _A =25°C unless otherwise noted)						
Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward voltage	I _F =1mA	V _{F1}	-	-	0.715	V
	I _F =10mA	V _{F2}	-	-	0.855	V
	I _F =50mA	V _{F3}	-	-	1	V
	I _F =150mA	V _{F4}	-	-	1.25	V
Reverse current	V _R =75V	I _{R1}	-	-	1	uA
	V _R =20V	I _{R2}	-	-	25	nA
Capacitance between terminals	V _R =0V,f=1MHz	C _T	-	-	2	pF
Reverse recovery time	I _F =I _R =10mA,I _{rr} =0.1X _{I_R} ,R _L =100Ω	t _{rr}	-	-	4	nS

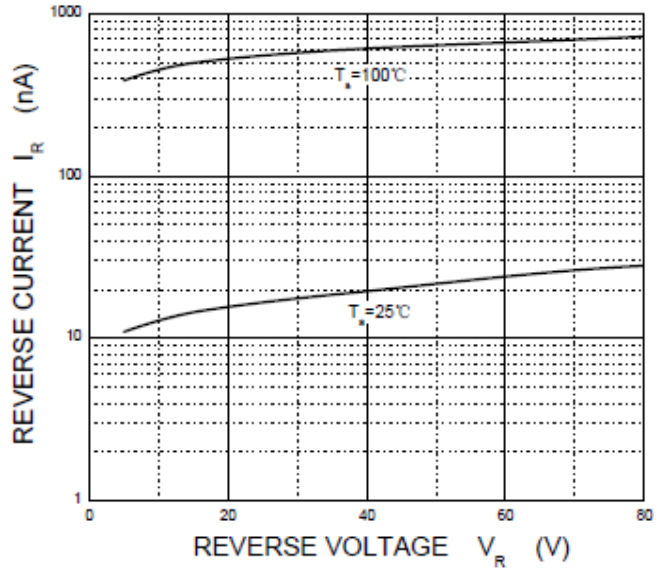


Rating and Characteristics Curves

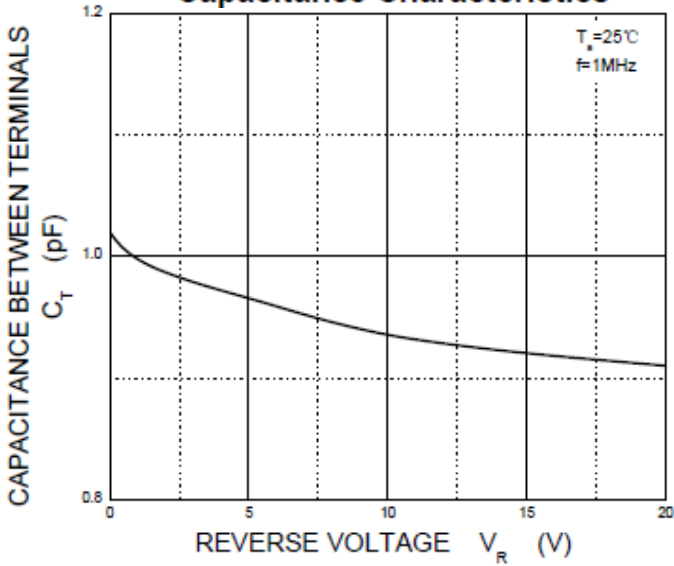
Forward Characteristics



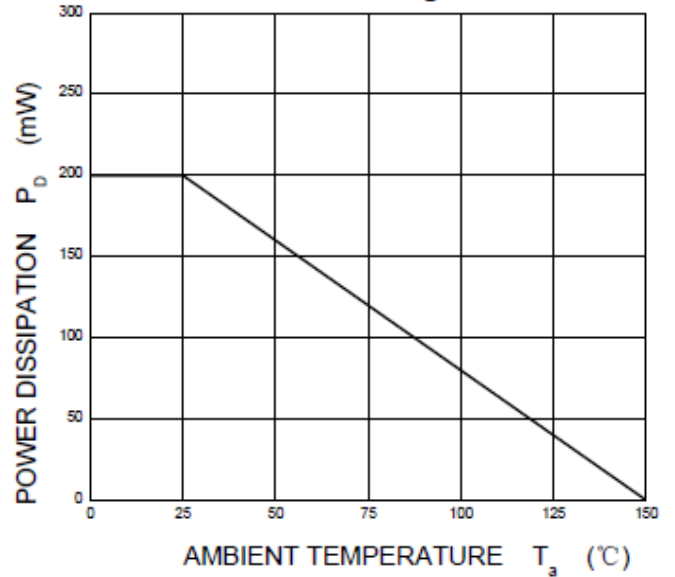
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



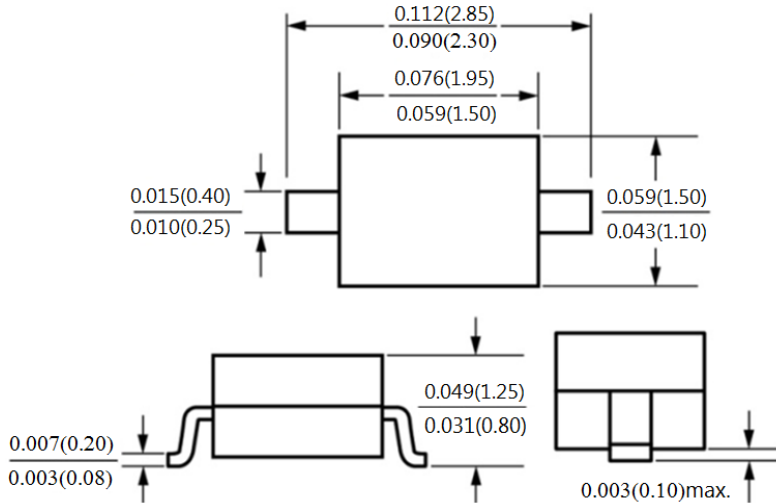


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Package Outline Dimensions

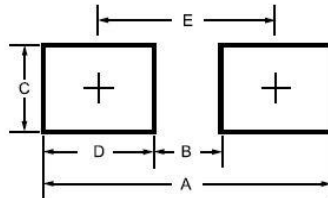


SOD-323

Dimensions in inches and (millimeters)

Suggested Pad Layout

Outline Symbol	SOD-323 millimeters
A	-
B	1.45
C	0.83
D	0.70
E	-



Tape & Reel Specification

Item	Symbol	Dimension millimeters
Carrier length	B	4.5max.
Carrier depth	C	2.4max.
Sprocket hole	d	1.55 ±0.1
Reel outside diameter	D	178max.
Reel inner diameter	D1	50min.
Feed hole width	D2	13.0 ±0.2
Sprocket hole position	E	1.75 ±0.1
Punch hole position	F	3.50 ±0.05
Punch hole pitch	P	4.0 ±0.1
Sprocket hole pitch	P0	4.0 ±0.1
Embossment center	P1	2.0 ±0.05
Tape width	W	8±0.3
Reel width	W1	14.4max.

