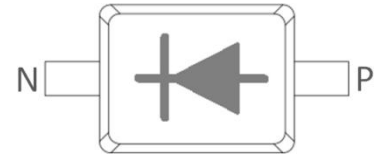




BAV16WS 1N4148WS SOD-323 Plastic-Encapsulate Switching Diodes

◆ **Features**

- Fast Switching Speed.
- High Conductance.
- For General Purpose Switching Applications.
- Surface Mount Package Ideally Suited for Automatic Insertion.



◆ **Absolute Maximum Ratings(Ta=25°C)**

Symbol	Parameter	Value	Unit
V _{RM}	Non-repetitive Peak Reverse Voltage	100	V
V _{RRM}	Peak Repetitive Peak Reverse Voltage		
V _{RWM}	Working Peak Reverse Voltage		
V _R	DC Blocking Voltage		
V _{R(RMS)}	RMS Reverse Voltage	71	V
I _O	Average Rectified Output Current	150	mA
I _{FM}	Forward Continuous Current	300	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	2.0	A
P _d	Power Dissipation	200	mW
R _{ΘJA}	Thermal Resistance From Junction To Ambient	600	°C/W
T _J	Operation Junction Temperature Range	-40~+125	°C
T _{STG}	Storage Temperature Range	-55~+150	°C

◆ **Electrical Characteristics (Ta=25°C unless otherwise specified)**

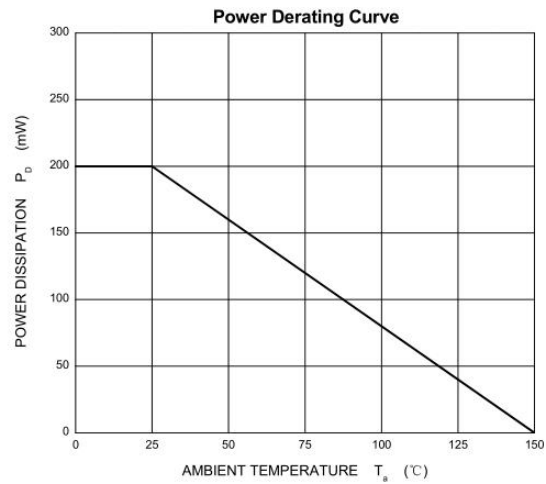
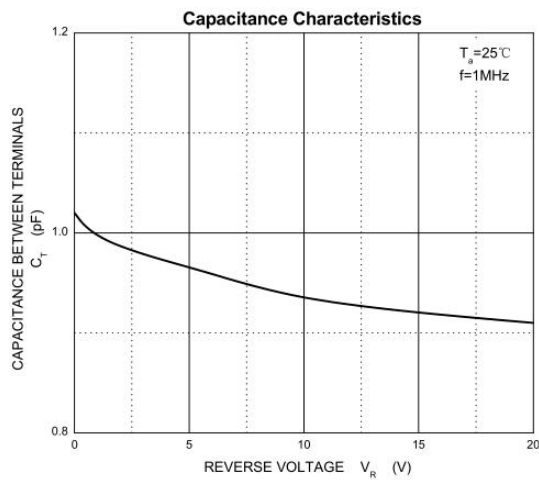
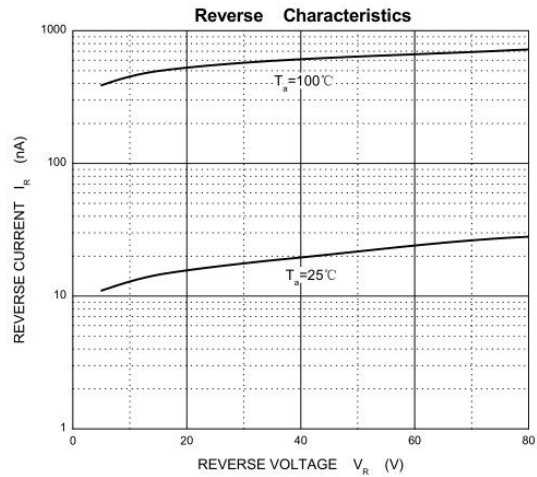
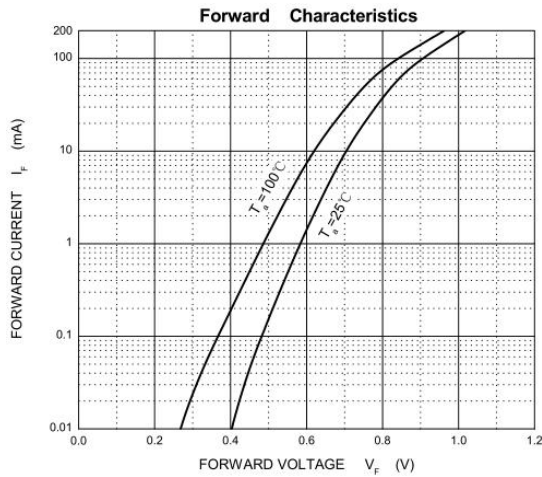
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V _(BR)	Reverse breakdown voltage	I _R =100μA	100			V
I _R	Reverse current	V _R =75V			1	μA
		V _R =20V			25	nA
V _F	Forward voltage	I _F =1mA			0.45	V
		I _F =10mA			0.55	V
		I _F =50mA			0.5	V
		I _F =150mA			0.875	V
C _D	Diode capacitance	V _R =0V, f=1MHz			2	pF
t _{rr}	Reverse recovery time	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω			4	nS

◆ **Marking**

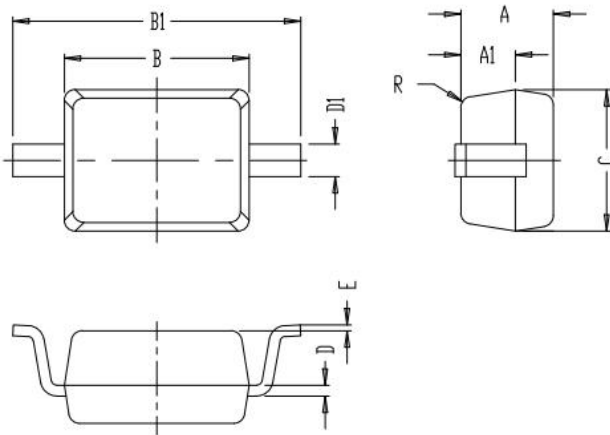
Part	BAV16WS	1N4148WS
Marking		



◆ Typical Characteristics



◆ SOD-323 Package Outline Dimensions



Symbol	Dim in mm		
	Min	Nom	Max
A	0.700	0.800	0.900
A1	0.45	0.500	0.55
B	1.650	1.700	1.750
B1	2.550	2.650	2.750
C	1.250	1.300	1.350
D	0.100	0.110	0.120
D1	0.280	0.300	0.320
E	0.000	-	0.1
R	0.020	-	0.050

◆ Packaging SPEC.

Units				
Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box
3,000	15	45,000	4	180,000
Reel	Dimension (unit: mm ³)			
	Inner Box		Outer Box	
7" × 8	190×190×190		400×400×210	