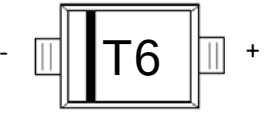


Features

- High switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications



SOD-123 top view

1N4148W	BAV16W
	
Marking:T4	Marking:T6
	



Halogen-Free

Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

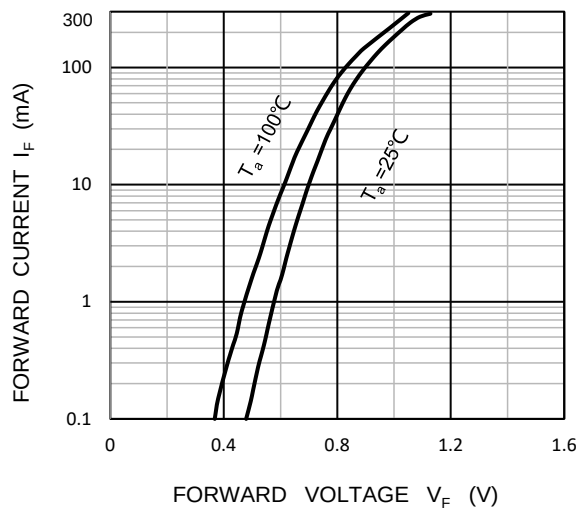
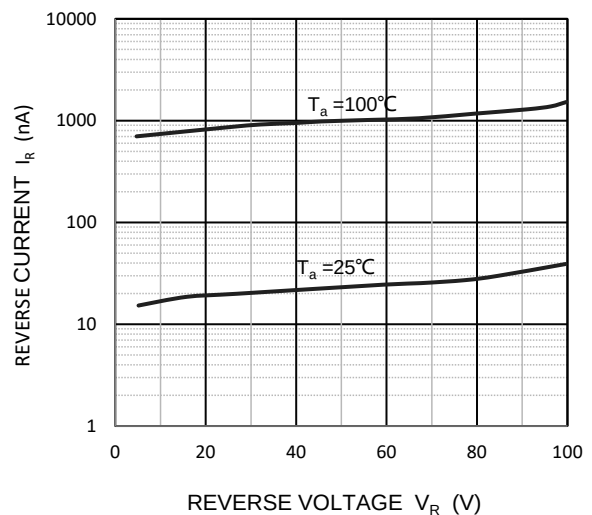
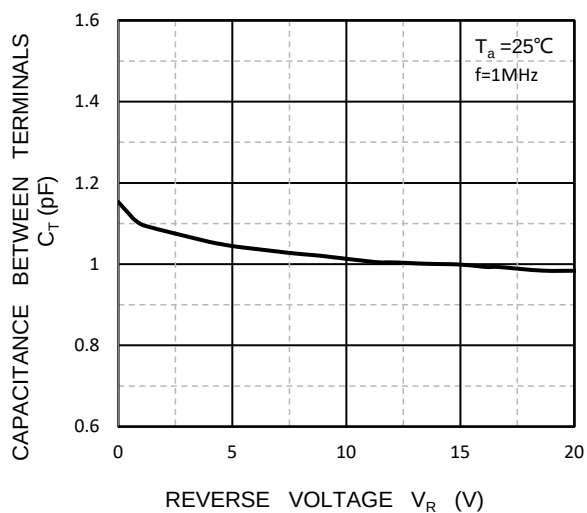
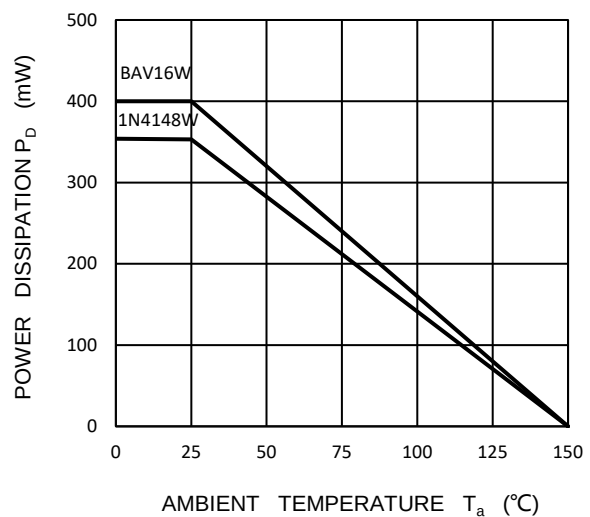
Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_R	Reverse Voltage	100	V
V_{RRM}	Peak Repetitive Reverse Voltage	100	V
V_{RWM}	Working Peak Reverse Voltage	100	V
$V_{R(RMS)}$	RMS Reverse Voltage	71	V
I_O	Average Rectified Output Current	150	mA
I_{FM}	Forward Continuous Current	300	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current@ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	1N4148W	350 mW
		BAV16W	400 mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	1N4148W	357.1 $^{\circ}\text{C/W}$
		BAV16W	312.5 $^{\circ}\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

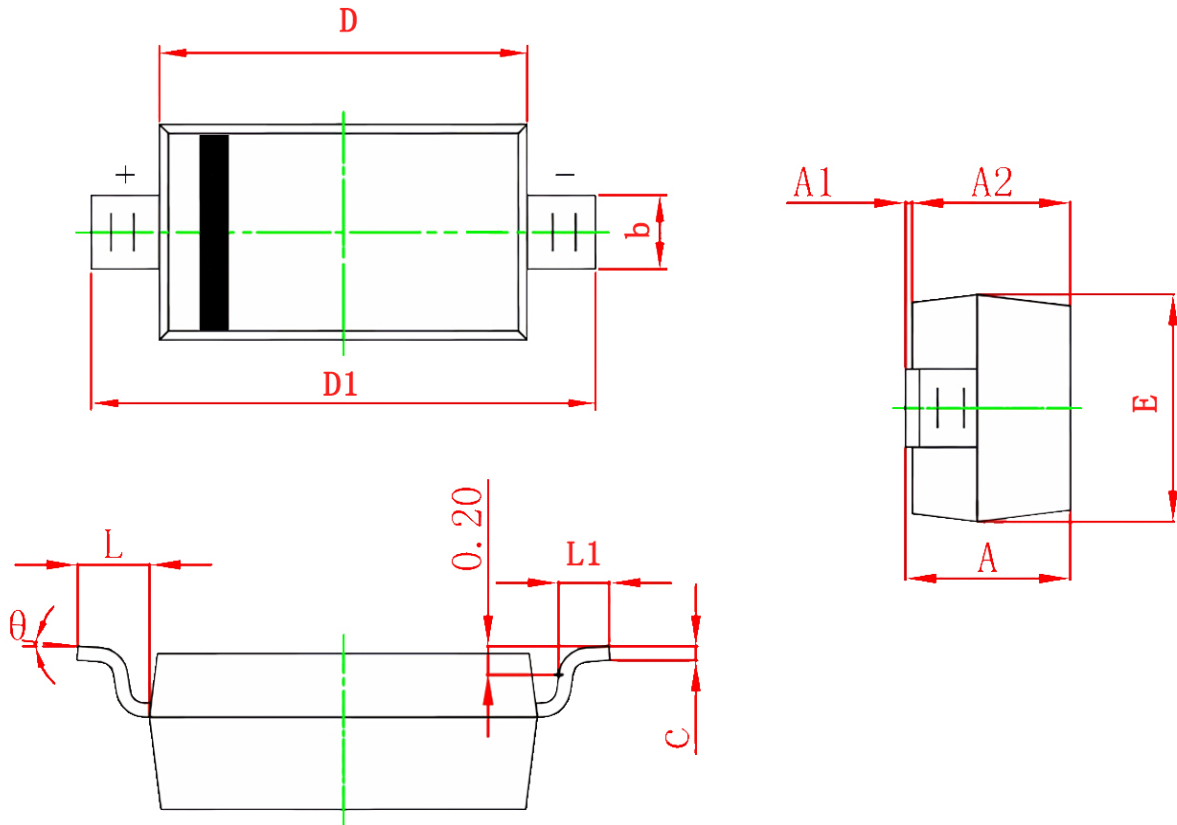
Symbol	Parameter	Condition	Min	Typ	Max	Unit
I_{R1}	Reverse current	$V_R=75\text{V}$	--	--	1	μA
I_{R2}		$V_R=20\text{V}$	--	--	25	nA
V_F	Forward voltage	$I_F=1\text{mA}$	--	--	0.715	V
		$I_F=10\text{mA}$	--	--	0.855	V
		$I_F=50\text{mA}$	--	--	1	V
		$I_F=150\text{mA}$	--	--	1.25	V
C_{tot}	Total capacitance	$V_R=0\text{V}, f=1\text{MHz}$	--	--	2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=0.1I_R, R_L=100\Omega$	--	--	4	ns

Ordering Information (Example)

Type	Package	Marking	Minimum	Inner Box	Outer	Delivery
1N4148W	SOD-123	T4	3,000	45,000	180,000	7"reel
BAV16W	SOD-123	T6	3,000	45,000	180,000	7"reel

Typical Operating Characteristics
Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve


SOD-123 Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	2.600	2.800	0.102	0.110
D1	3.550	3.850	0.140	0.152
E	1.500	1.700	0.059	0.067
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°