



Features

- Average Rectified Output Current: $I_O=150\text{ mA}$
- High Conductance



SOD-123



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAV16W	SOD-123	T6	3000
1N4148W	SOD-123	T4	3000

Maxmim Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working	V_{RRM}	100	V
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
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	1N4148W BAV16W	350 400	mW
Thermal Resistance from Junction to Ambient(Note 1)	1N4148W BAV16W	357.1 312.5	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	°C

Note 1:Device mounted on 1"x1" FR4 PCB,1oz single-side copper.

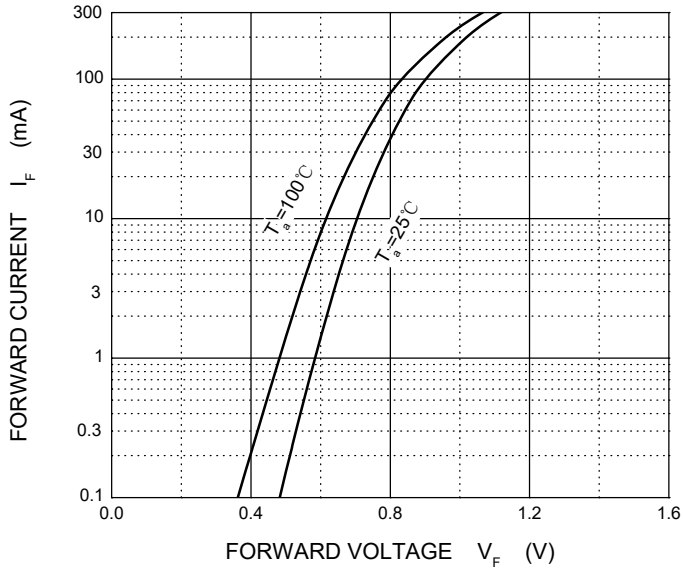
Electrcal Charcteristics (Ta=25°C unless otherwise specified)

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

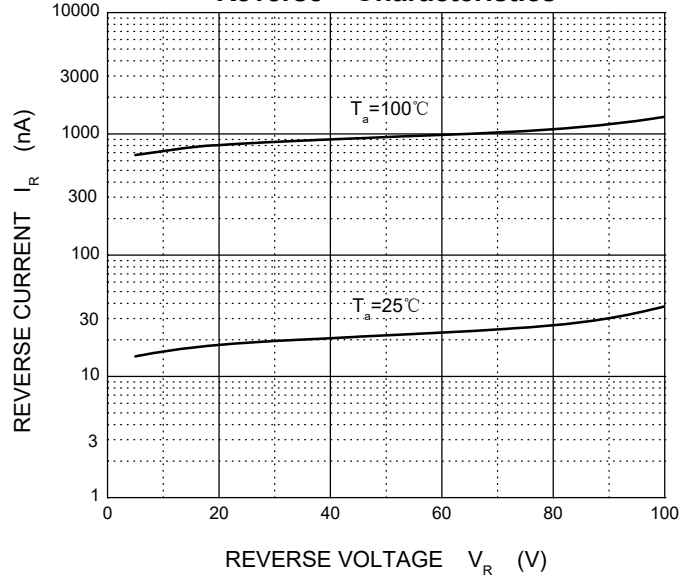


Typical Characteristics

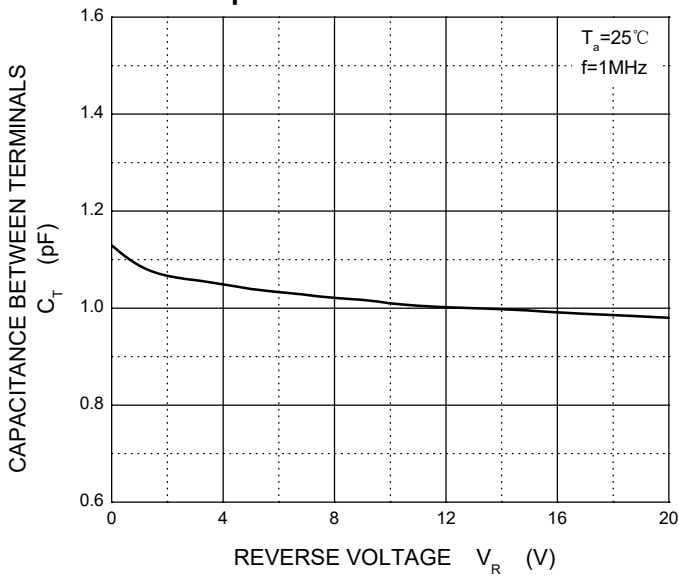
Forward Characteristics



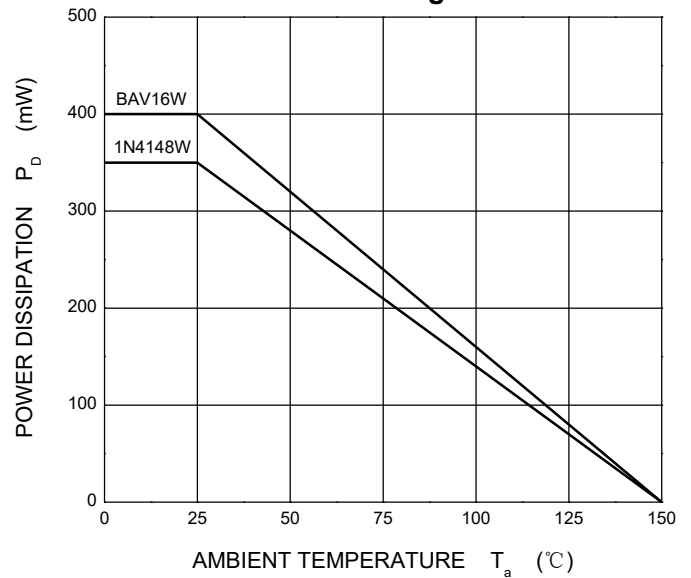
Reverse Characteristics



Capacitance Characteristics

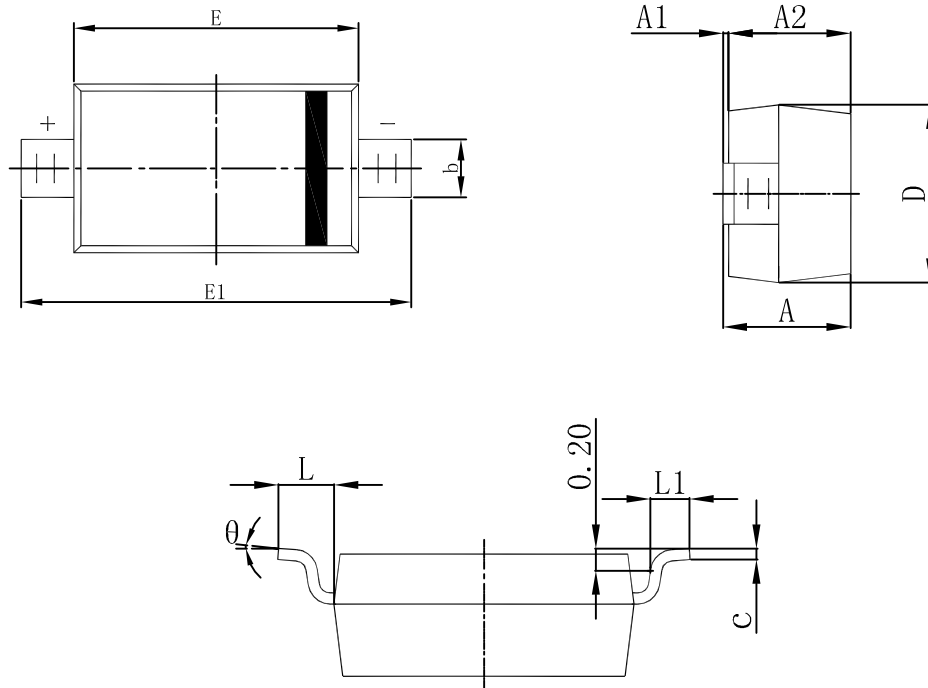


Power Derating Curve





SOD-123 Package Outline Dimensions



Symbol	Dimensions In Millimeters		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	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°



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