

自主封測 品質把控 售後保障

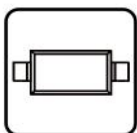
WEB | WWW.TDSEMIC.COM



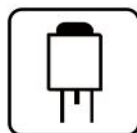
電源管理



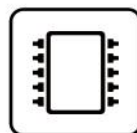
顯示驅動



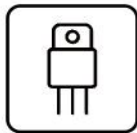
二三極管



LDO穩壓器



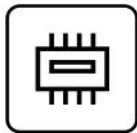
觸摸芯片



MOS管



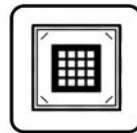
運算放大器



存儲芯片



MCU



串口通信

1N4148W T4-TD (0.23)

產品規格說明書

BAV16W/1N4148W FAST SWITCHING DIODE

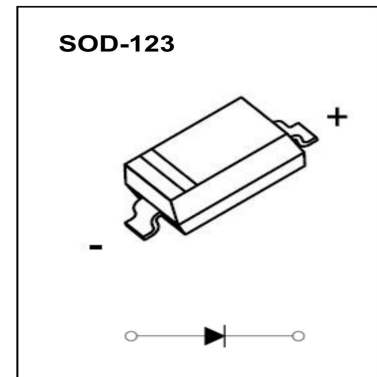
FEATURES

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

MARKING: T6,T4

1N4148W	BAV16W

The marking bar indicates the cathode
Solid dot = Green molding compound device.



Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RPM}		
Working Peak Reverse Voltage	V _{RWM}	100	V
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	Pd	350	mW
		400	
Thermal Resistance from Junction to Ambient(Note 1)	R _{θJA}	357.1	°C/W
		312.5	
Operation Junction and Storage Temperature Range	T _J , T _{STG}	-55~+150	°C

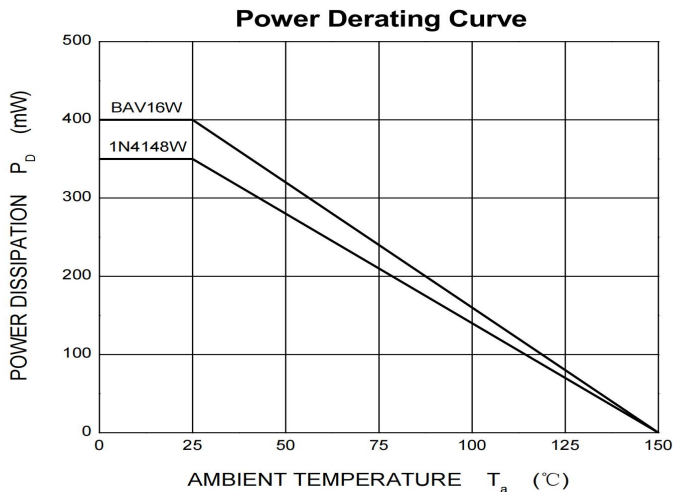
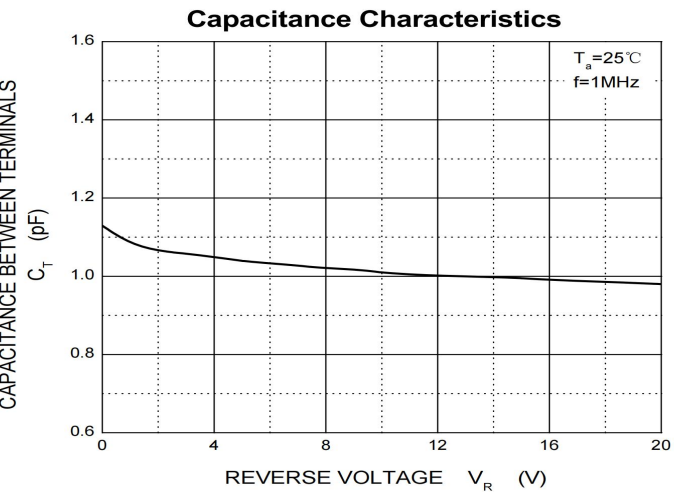
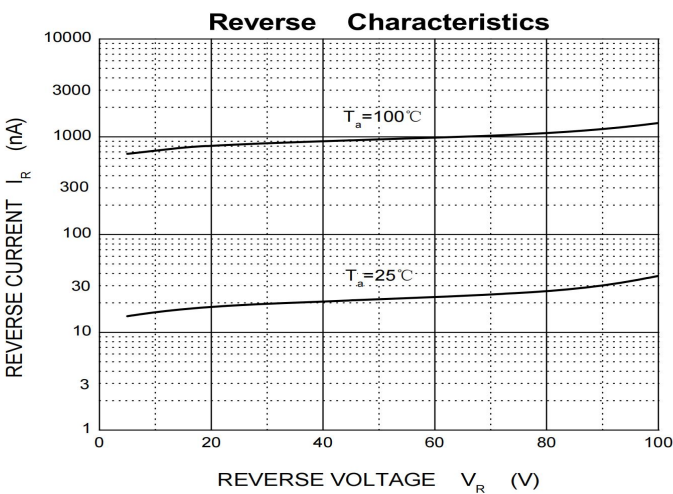
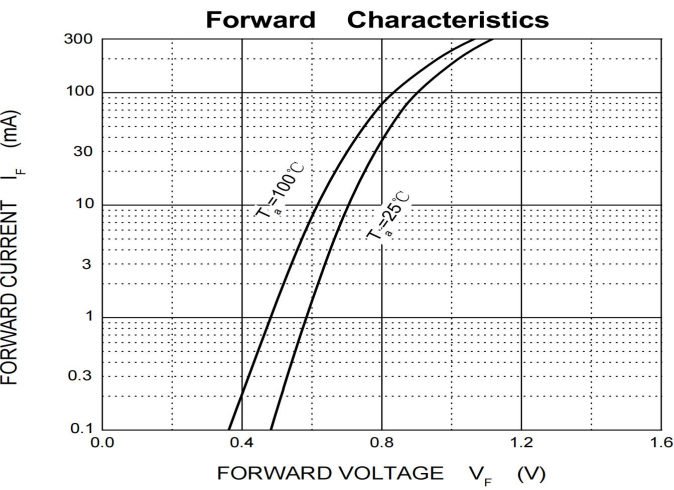
Note 1: Device mounted on 1"x1" FR4 PCB, 1oz single-side copper.

ELECTRICAL CHARACTERISTICS

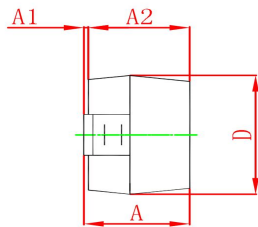
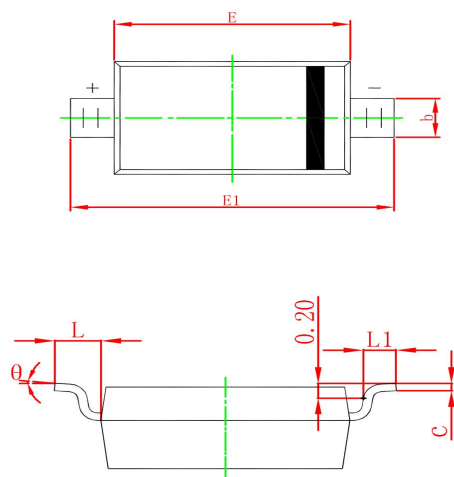
Electrical Ratings @Ta=25°C

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 I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics

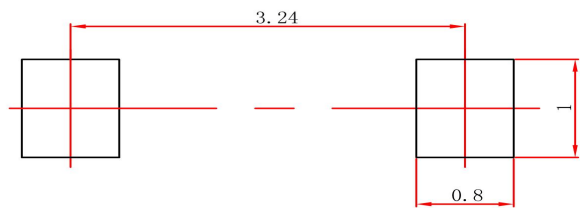


SOD-123 Package Outline Dimensions



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°

SOD-123 Suggested Pad Layout



Note:
1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05mm.
3. The pad layout is for reference purposes only.