Technical Data
Data Sheet N0589, Rev. -

Green Products

BAV16W SCHOTTKY BARRIER DIODE

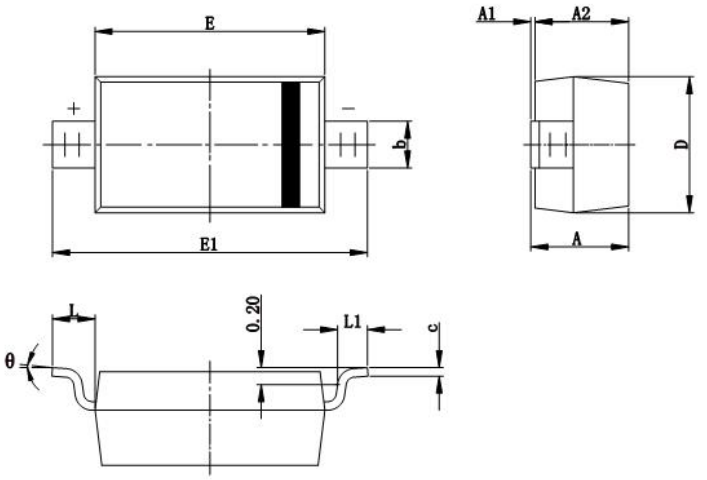
Features:

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

Mechanical Data:

- **Case: SOD-123, Molded Plastic**
- **Terminals: Plated Leads Solderable per MIL-STD-202, Method 208**
- **Polarity: Cathode Band**
- **Marking: T6**
- **Weight: 0.01 grams(approx)**

Mechanical Dimensions: In mm / Inches



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(CJ)

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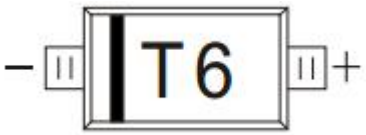
Marking Diagram:



T6 = Part Name

Cautions: Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
BAV16W	SOD-123(Pb-Free)	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	75	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
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 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	2	A
Power Dissipation	P_d	400	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	250	°C/W
Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

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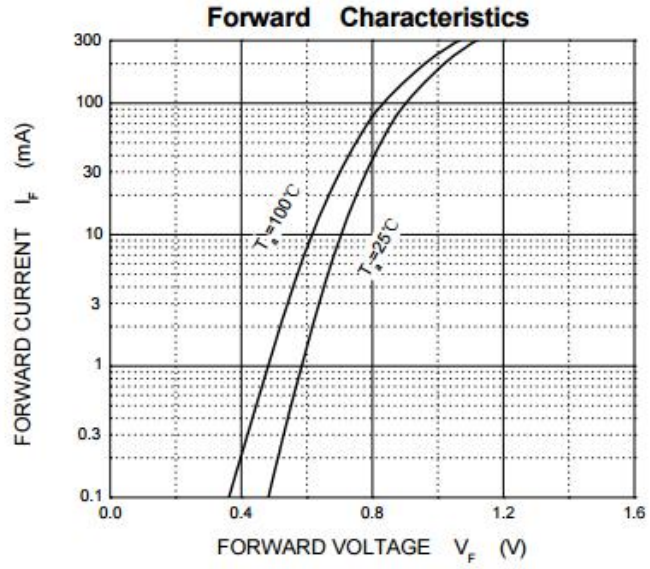
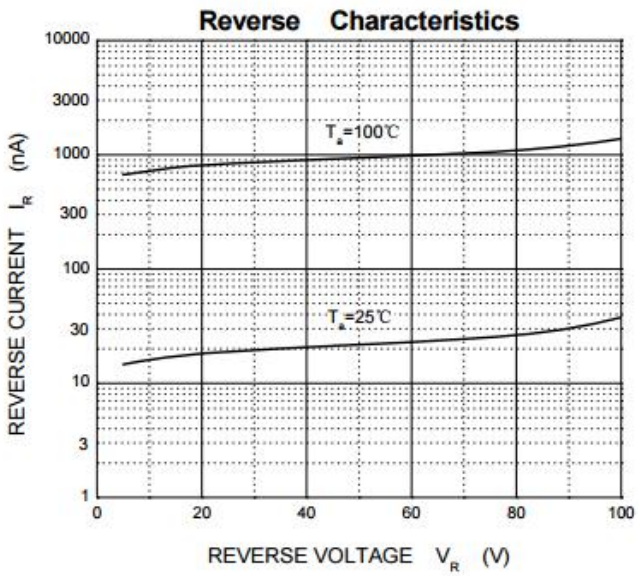
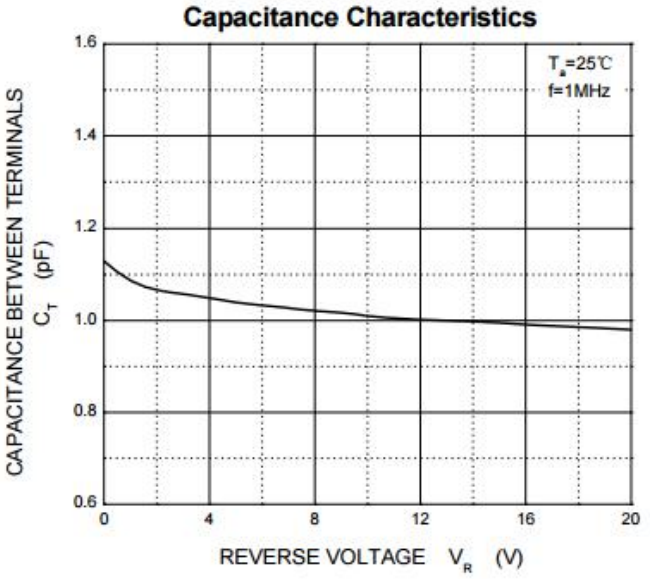
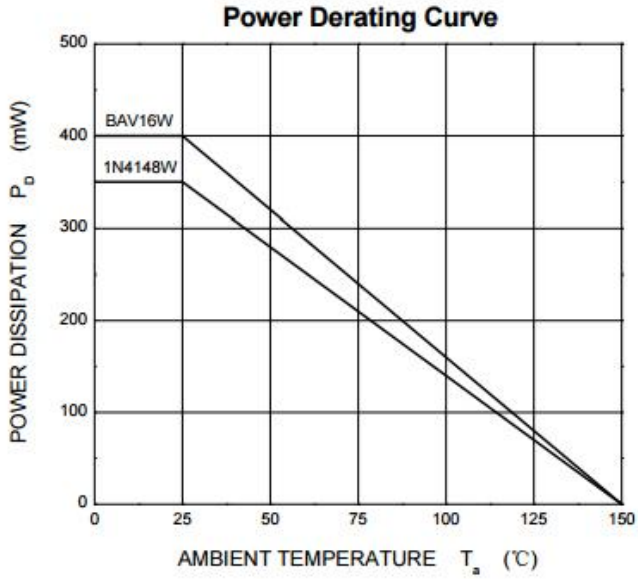
Characteristic	Symbol	Max	Unit	Test Condition
Forward Voltage	V_F	0.715 0.855 1.0 1.25	V	I_F=1mA I_F=10mA I_F=50mA I_F=150mA
Reverse Leakage Current	I_R	1	μA	V_R=75V
Capacitance between terminals	C_T	2	pF	V_R=0V,f=1.0MHz
Reverse recovery time	t_{rr}	4	ns	I_F= I_R=10mA, I_{rr}=0.1×I_R, R_L=100Ω

Typical Characteristics









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