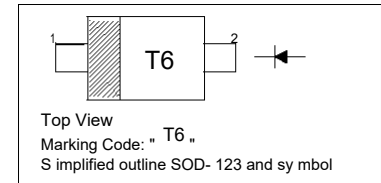


# SOD-123 Plastic-Encapsulate Diodes

## BAV16W FAST SWITCHING DIODE

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### FEATURES

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

### MARKING: T6

### Maximum Ratings and Electrical Characteristics, Single Diode @T<sub>a</sub>=25°C

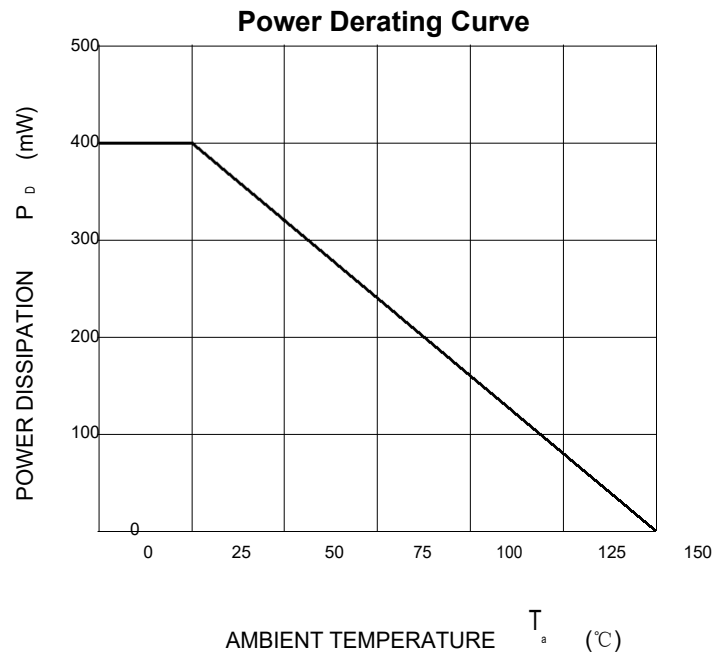
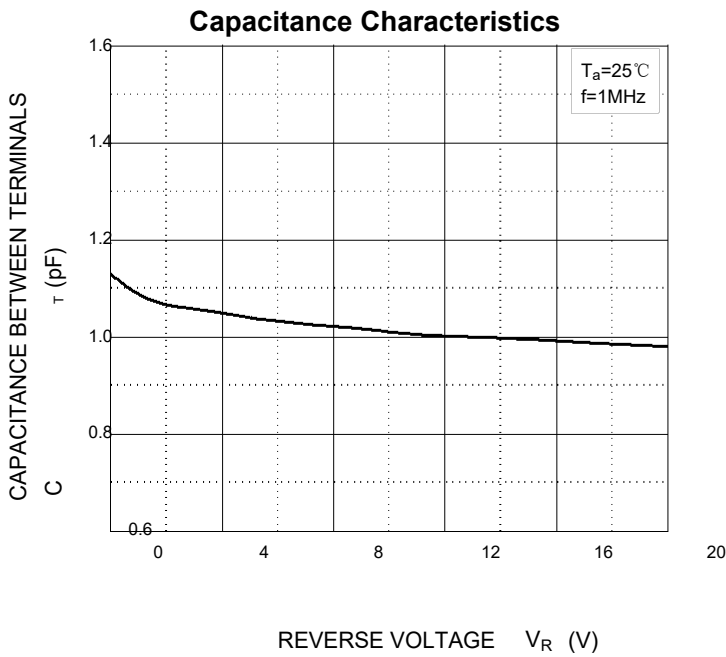
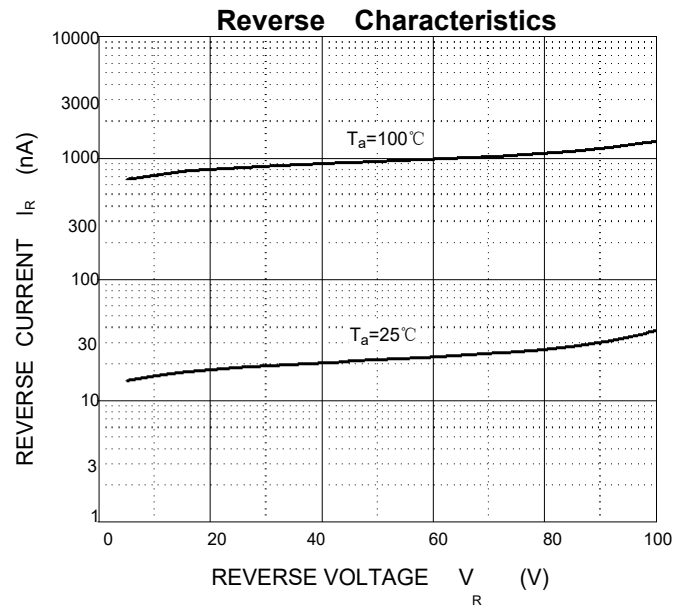
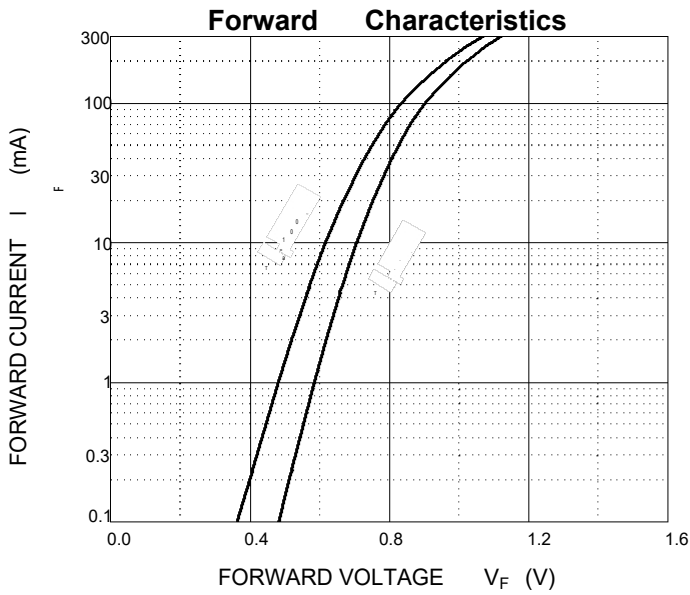
Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	100	V
Working Peak Reverse Voltage	V <sub>RWM</sub>		
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R(RMS)</sub>	71	V
Forward Continuous Current	I <sub>FM</sub>	300	mA
Average Rectified Output Current	I <sub>o</sub>	150	mA
Non-Repetitive Peak Forward Surge Curr nt @t=8.3ms	I <sub>FSM</sub>	2.0	A
Power Dissipation <b>BAV16W</b>	P <sub>d</sub>	400	mW
Thermal Resistance from Junction to Ambient	R <sub>θJA</sub>	312	°C/W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-55~+150	°C

### ELECTRICAL CHARACTERISTICS

#### Electrical Ratings @T<sub>a</sub>=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1mA
	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
	V <sub>F3</sub>			1.0	V	I <sub>F</sub> =50mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
Reverse current	I <sub>R1</sub>			1	μA	V <sub>R</sub> =75V
	I <sub>R2</sub>			25	nA	V <sub>R</sub> =20V
Capacitance between terminals	C <sub>T</sub>			2	pF	V <sub>R</sub> =0V,f=1MHz
Reverse recovery time	t <sub>rr</sub>			4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA I <sub>rr</sub> =0.1X I <sub>R</sub> ,R <sub>L</sub> =100Ω

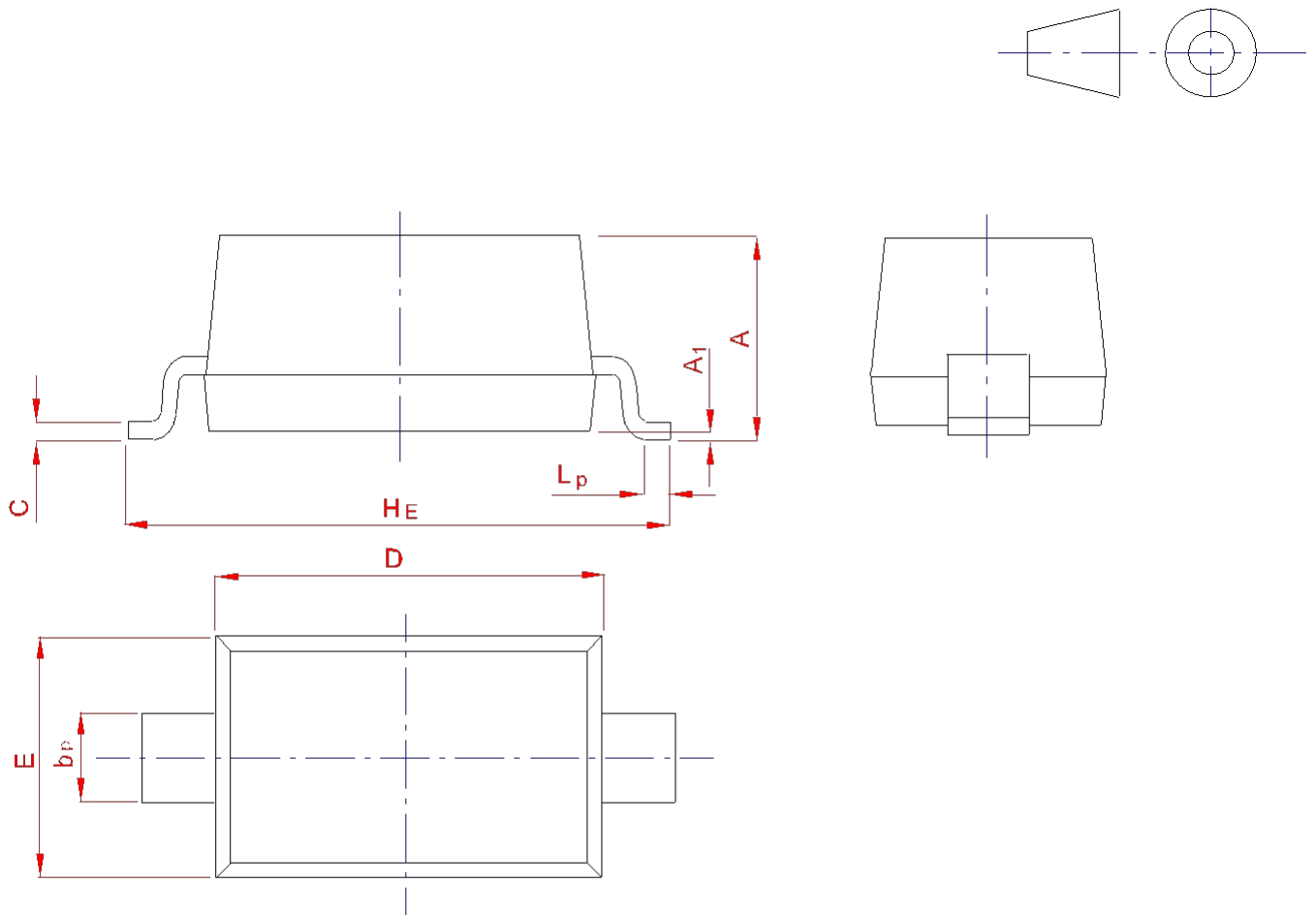
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	bp	C	D	E	HE	A1	Lp
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20