

## FAST SWITCHING DIODES

**BAV16W/1N4148W**

**VOLTAGE RANGE**  
**CURRENT**

**75 Volts**  
**1.0 Ampere**

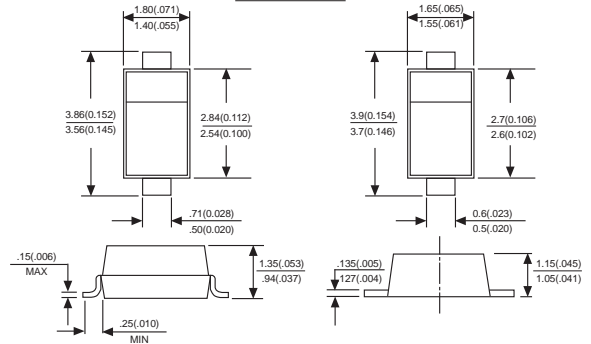
### FEATURES

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

### MECHANICAL DATA

- Case : Molded plastic body
- Terminals : Plated leads solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbols marked on case
- Marking :T6, T4

### SOD-123



Dimensions in millimeters and (inches)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Maximum ratings and electrical characteristics, Single diode @T<sub>A</sub>=25°C

PARAMETER	SYMBOLS	Limits				UNITS
Peak repetitive peak reverse voltage	V <sub>RRM</sub>	75				V
Working peak	V <sub>RWM</sub>	75				V
DC Blocking voltage	V <sub>R</sub>	75				V
RMS Reverse voltage	V <sub>R(RMS)</sub>	53				V
Forward continuous current	I <sub>FM</sub>	300				mA
Average rectified output current	I <sub>o</sub>	150				mA
Peak forward current @=1.0us	I <sub>FSM</sub>	2.0				A
@=1.0s		1.0				A
Power dissipation	P <sub>d</sub>	400				mW
Thermal resistance junction to ambient	R <sub>θJA</sub>	315				K/W
Junction temperature	T <sub>j</sub>	125				°C
Storage temperature	T <sub>STG</sub>	-65 to +150				°C
Non-Repetitive peak reverse voltage	V <sub>RM</sub>	100				V
Electrical ratings @T <sub>A</sub> =25°C						
PARAMETER	SYMBOLS	Min.	Typ.	Max.	Unit	Conditions
Froward voltage	V <sub>F1</sub>			0.715	V	I <sub>F</sub> =1.0mA
	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	uA	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=1.0MHz
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



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