

## JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

# **SOD-123 Plastic-Encapsulate Diodes**

## 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** 

Maximum Ratings and Electrical Characteristics, Single Diode @T₂=25℃



Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$		
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 <sub>FM</sub>	300	mA
Average Rectified Output Current	lo	150	mA
Peak Forward Surge Current @t=1.0µs		2.0	А
@t =1.0s	I <sub>FSM</sub>	1.0	
Power Dissipation	Pd	500	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	250	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	T <sub>STG</sub>	-55~+150	°C

### Electrical Ratings @Ta=25℃

Parameter	Symbol	Min	Тур	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	Ст			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
						Irr=0.1 $XI_R$ , $R_L$ =100 $\Omega$

# **Typical Characteristics**

# **BAV16W/1N4148W**







