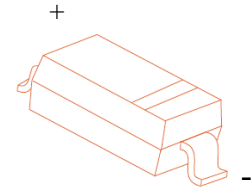




SOD-123 Plastic-Encapsulate Diodes

BAV16W/1N4148W FAST SWITCHING DIODES

SOD-123



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 @ $T_a=25^{\circ}\text{C}$

Parameter	Symbol	BAV16W	1N4148W	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100		V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75		V
Working Peak Reverse Voltage	V_{RWM}			V
DC Blocking Voltage	V_R			V
RMS Reverse Voltage	$V_{R(RMS)}$	52.5		V
Forward Continuous Current	I_{FM}	300		mA
Average Rectified Output Current	I_O	150		mA
Peak Forward Surge Current @ $t=1.0\mu\text{s}$	I_{FSM}	2.0		A
@ $t=1.0\text{s}$		1.0		
Power Dissipation	P_d	100	150	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	312	357	$^{\circ}\text{C/W}$
Junction Temperature	T_j	150		$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55~+150		$^{\circ}\text{C}$

Electrical Ratings @ $T_a=25^{\circ}\text{C}$

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}			0.715	V	$I_F=1\text{mA}$
	V_{F2}			0.855	V	$I_F=10\text{mA}$
	V_{F3}			1.0	V	$I_F=50\text{mA}$
	V_{F4}			1.25	V	$I_F=150\text{mA}$
Reverse current	I_{R1}			1	μA	$V_R=75\text{V}$
	I_{R2}			25	nA	$V_R=20\text{V}$
Capacitance between terminals	C_T			2	pF	$V_R=0\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}			4	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

Typical Characteristics

BAV16W/1N4148W

