

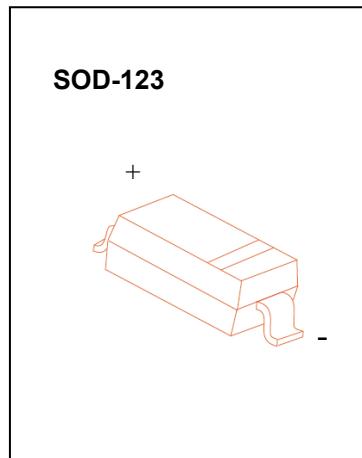
## BAV16W/1N4148W FAST SWITCHING DIODES

### 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	Limits		Unit
<b>Non-Repetitive Peak reverse voltage</b>	$V_{RM}$	100		V
<b>Peak Repetitive Peak reverse voltage</b>	$V_{RRM}$			
<b>Working Peak Reverse Voltage</b>	$V_{RWM}$	75		V
<b>DC Blocking Voltage</b>	$V_R$			
<b>RMS Reverse Voltage</b>	$V_{R(RMS)}$	53		V
<b>Forward Continuous Current</b>	$I_{FM}$	300		mA
<b>Average Rectified Output Current</b>	$I_o$	150		mA
<b>Peak forward surge current @=1.0μs @=1.0s</b>	$I_{FSM}$	2.0 1.0		A
<b>Power Dissipation</b>	$P_d$	500		mW
<b>Thermal Resistance Junction to Ambient</b>	$R_{\theta JA}$	250		°C/W
<b>Junction temperature</b>	$T_j$	150		°C
<b>Storage temperature</b>	$T_{STG}$	-65~+150		°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
<b>Forward voltage</b>	$V_{F1}$			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	$I_F=150\text{mA}$
<b>Reverse current</b>	$I_{R1}$			1	$\mu\text{A}$	$V_R=75\text{V}$
	$I_{R2}$			25	nA	$V_R=20\text{V}$
<b>Capacitance between terminals</b>	$C_T$			2	pF	$V_R=0\text{V}, f=1\text{MHz}$
<b>Reverse Recovery Time</b>	$t_{rr}$			4	ns	$I_F=I_R=10\text{mA}$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

## Typical Characteristics

**BAV16W/1N4148W**

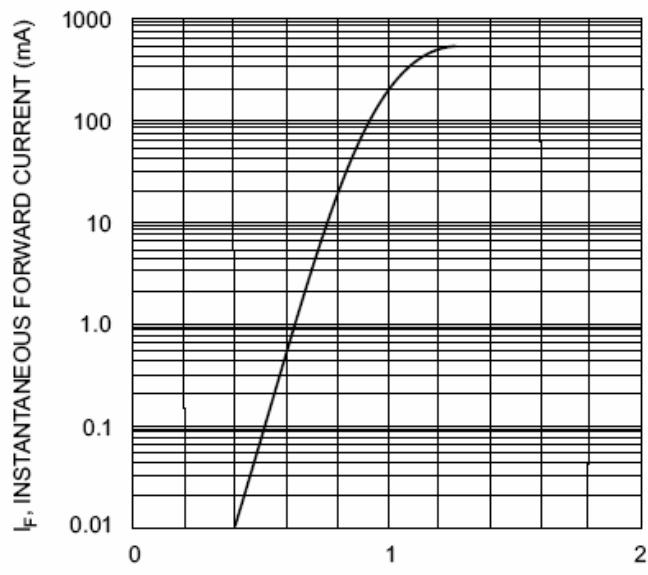


Fig. 1 Forward Characteristics

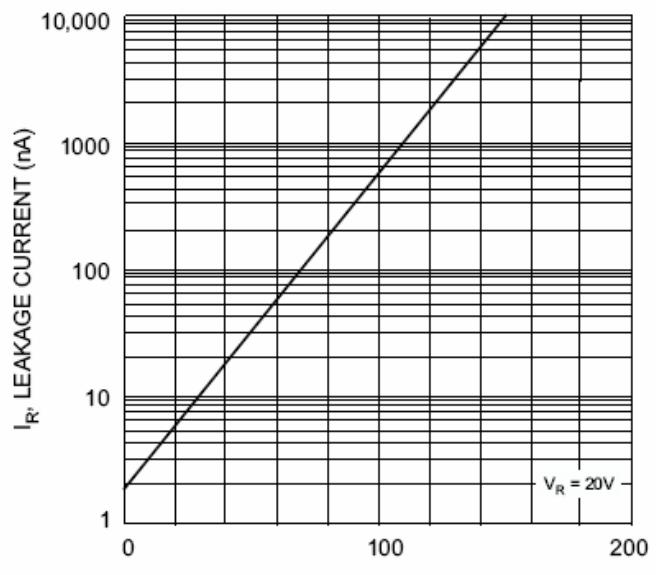


Fig. 2 Leakage Current vs Junction Temperature  
 $V_R = 20V$