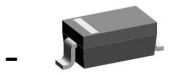
FAST SWITCHING DIODES

BAV19W/20W/21W

FEATURES

Fast switching speed

Surface mount package ideally suited for automatic insertion



SOD-123

MARKING: BAV19W : A8 BAV20W: T2 BAV21W: T3

MAXIMUM RATINGS (TA=25℃ unless otherwise noted)

Parameter	Symbol	BAV19W	BAV20W	BAV21 W	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	120	200	250	V
Peak Repetitive Peak reverse voltage	V_{RRM}	100	150	250	V
Working Peak Reverse Voltage	V_{RRM}				
DC Blocking	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward Continuous Current	I_{FM}	400			mA
Average Rectified Output Current	I_O	200			mA
Peak forward surge current @=1.0ms @=1.0s	I_{FSM} I_{FSM}	2.5 0.5			A A
Repetitive Peak Forward Current	I_{FRM}	625			mA
Power Dissipation	Pd	500			mW
Ambient Resistance Junction to Ambient	$R_{\theta JA}$	250			℃/W
Storage temperature	T_{STG}	-65-125			℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage		V_{F1}			1.0	V	I_F=100mA
		V_{F2}			1.25	V	I_F=200mA
Reverse current	BAV19W	I_R			0.1	μA	V_R=100V
	BAV20W	I_R			0.1	μA	V_R=150V
	BAV21W	I_R			0.1	μA	V_R=200V
Capacitance between terminals		C_T			5	pF	V_R=0,f=1MHz
Reverse Recovery Time		t_{rr}			50	ns	I_R=I_F=30mA I_{rr}=0.1*I_R,R_L=100Ω

BAV19W/20W/21W Typical Characteristics

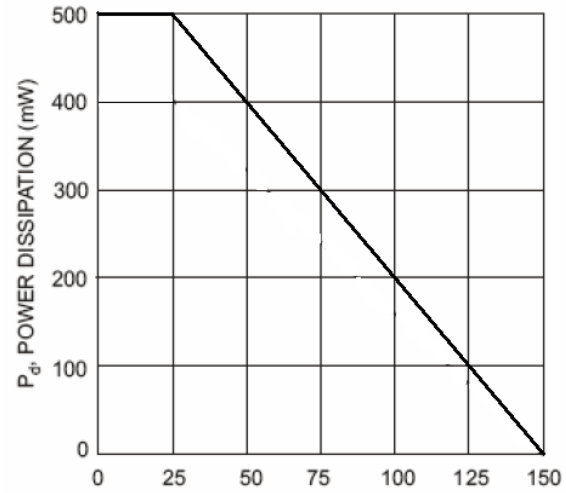


Fig. 1 Power Derating Curve

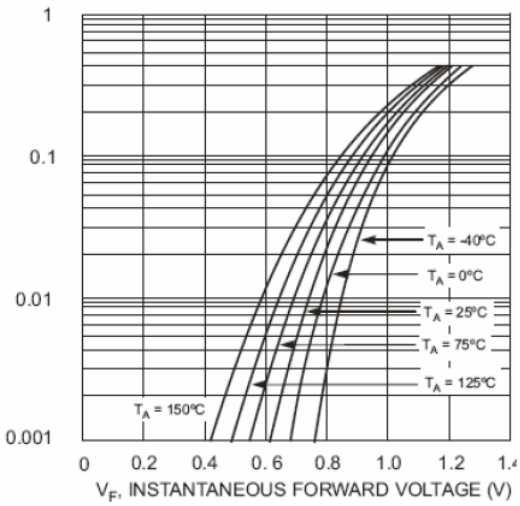


Fig. 2 Typical Forward Characteristics

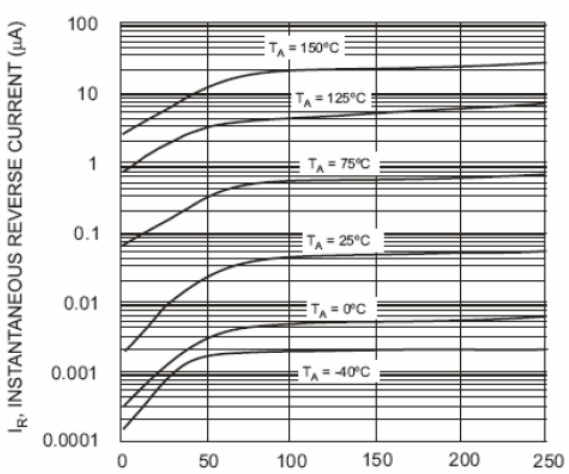


Fig. 3 Typical Reverse Characteristics

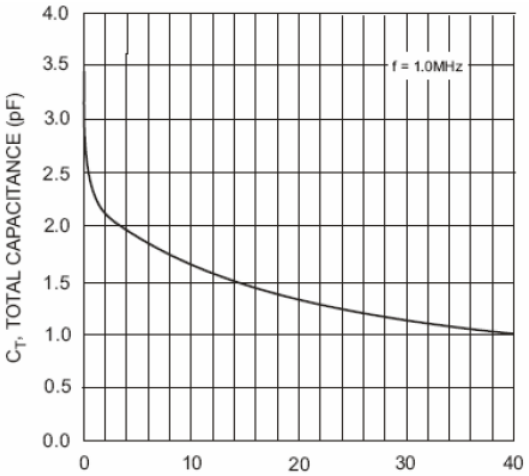


Fig. 4 Typical Capacitance vs. Reverse Voltage