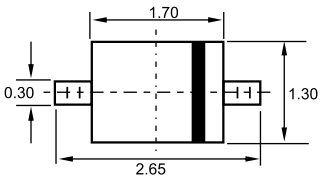
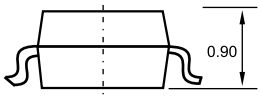
BAV19WS-BAV21WS

0.2W Fast Switching Diodes

SOD-323





Dimensions in inches and (millimeters)

Features

- ✧ Fast Switching Speed
- ✧ Surface Mount Package Ideally Suited for Automatic Insertion
- ✧ For General Purpose Switching Applications

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Parameter	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	120	200	250	V
Peak Repetitive Peak reverse voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	100	150	200	V
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}	2.5 0.5			A
Repetitive Peak Forward Current	I_{FRM}	625			mA
Power Dissipation	Pd	250			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500			℃/W
Storage temperature	T_{STG}	-65~+150			℃

Electrical Ratings

Parameter		Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage		V_{F1}			1.0	V	I_F=0.1A
		V_{F2}			1.25		I_F=0.2A
Reverse current	**BAV19WS**	I_R			0.1	μA	V_R=100V
	BAV20WS				0.1		V_R=150V
	BAV21WS				0.1		V_R=200V
Capacitance between terminals		C_T			5	pF	V_R=0V,f=1MHz
Reverse Recovery Time		t_{rr}			50	ns	I_F=I_R=30mA Irr=0.1XI_R,R_L=100Ω

Typical Characteristics

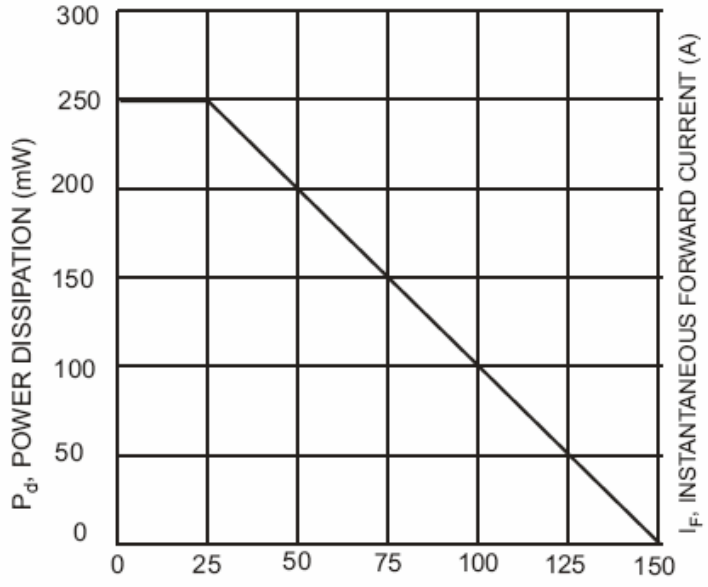


Fig. 1 Power Derating Curve

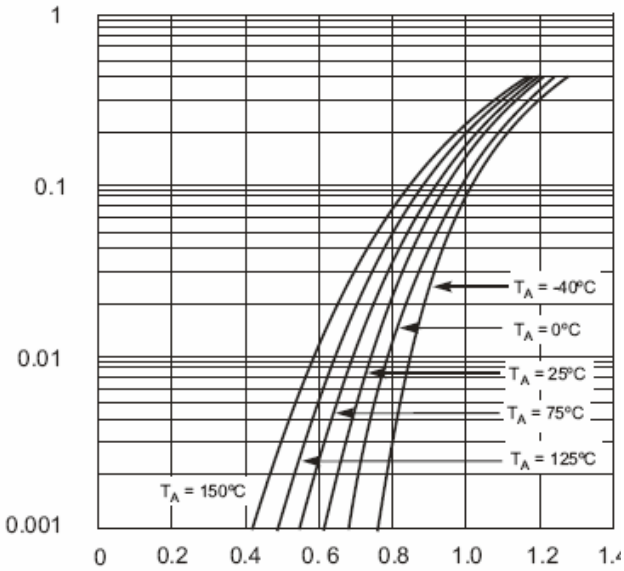


Fig. 2 Typical Forward Characteristics

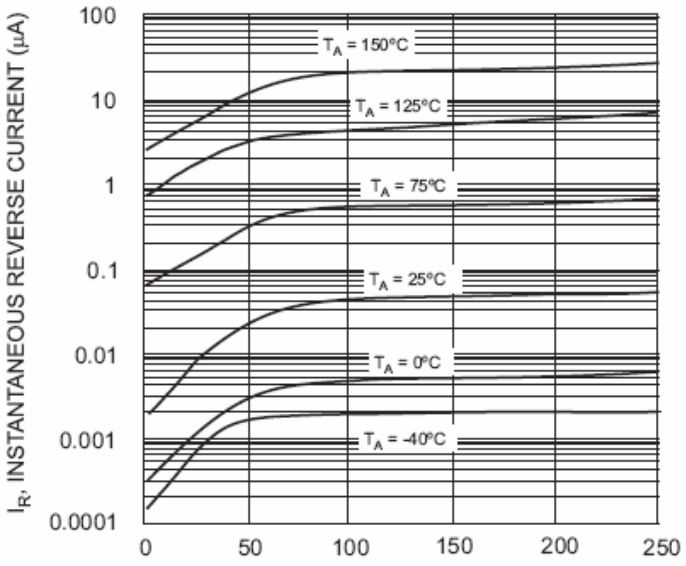


Fig. 3 Typical Reverse Characteristics

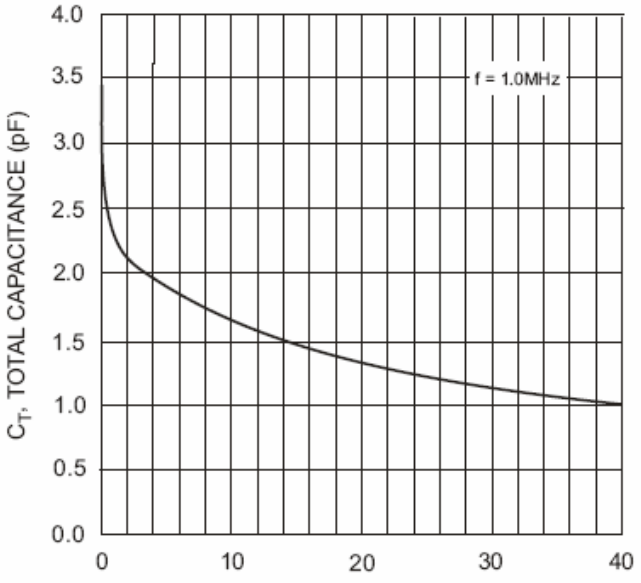


Fig. 4 Typical Capacitance vs. Reverse Voltage