



SOD-123 Plastic-Encapsulate Diodes

BAV19W/BAV20W/BAV21W

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: BAV19W: A8

BAV20W: T2

BAV21W: T3

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

Parameter	Symbol	BAV19W	BAV20W	BAV21W	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	120	200	250	V
Peak Repetitive Peak reverse voltage	V _{RRM}				
Working Peak Reverse Voltage	V _{RWM}	100	150	250	V
DC Blocking Voltage	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}		2.5 0.5		A
Repetitive Peak Forward Current	I _{FRM}		625		mA
Power Dissipation	P _d		250		mW
Thermal Resistance Junction to Ambient	R _{θJA}		500		°C/W
Storage temperature	T _{STG}		-65~+150		°C

Electrical Ratings @T_A=25°C

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	BAV19W BAV20W BAV21W	I _R		0.1	μA	V _R =100V
				0.1		V _R =150V
				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 I _{rr} =0.1X I _R ,R _L =100Ω

Typical Characteristics

BAV19W/BAV20W/BAV21W

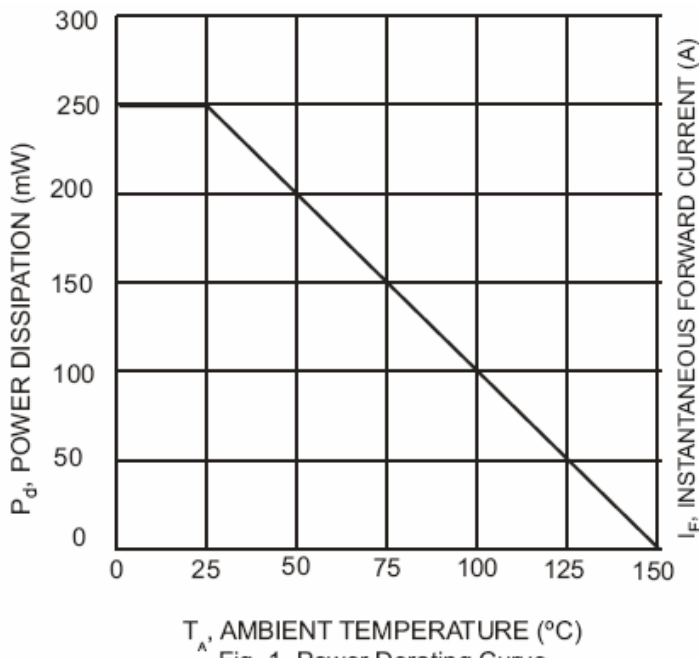


Fig. 1 Power Derating Curve

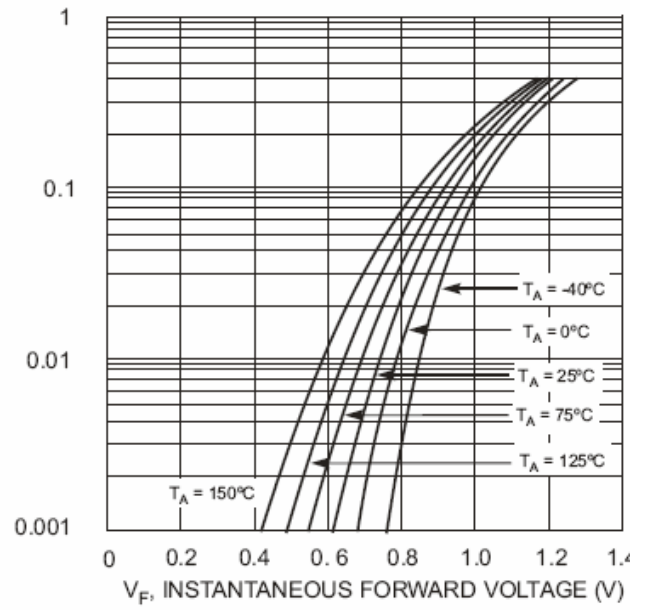


Fig. 2 Typical Forward Characteristics

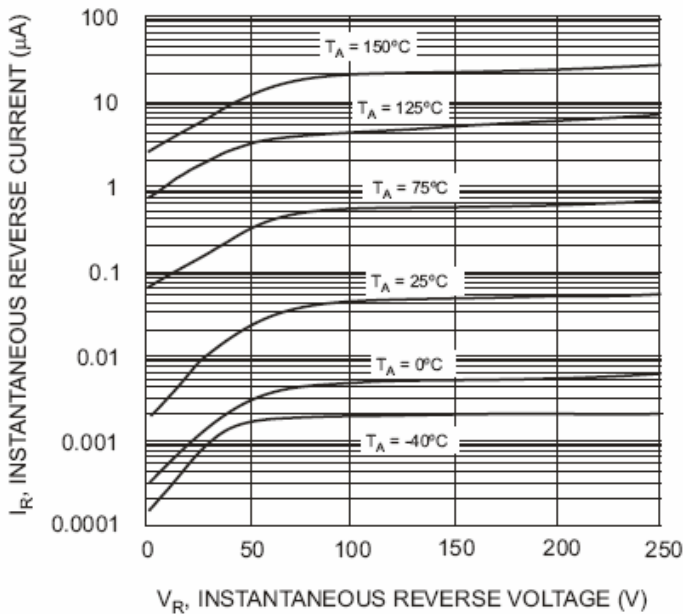


Fig. 3 Typical Reverse Characteristics

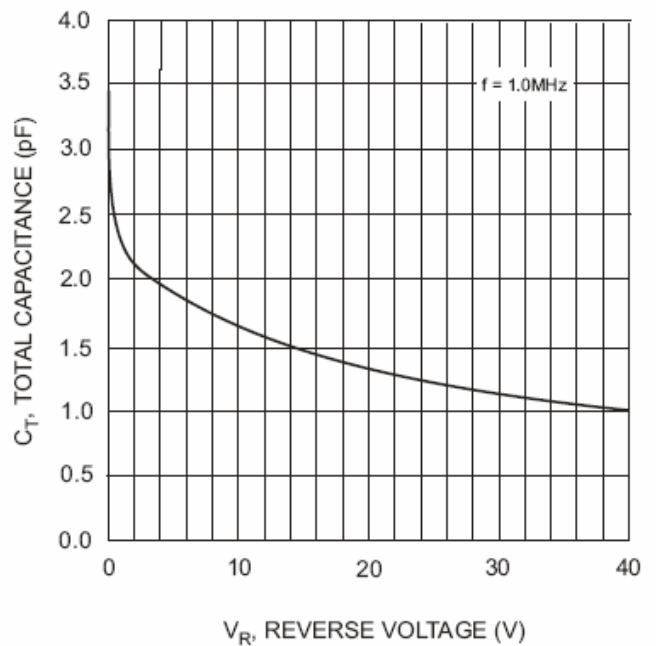


Fig. 4 Typical Capacitance vs. Reverse Voltage