

Silicon Epitaxial Planar Diode

BAV19WSG / BAV20WSG / BAV21WSG

Lead free product

FEATURES

- Fast Switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



APPLICATIONS

- Surface mount fast switching diode

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	BAV19WSG	BAV20WSG	BAV21WSG	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	120	200	250	V
Working Peak Reverse Voltage	V_{RWM}	100	150	200	V
DC Reverse Voltage	V_R				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
Non-Repetitive Peak Forward Surge Current	I_{FSM}				
@t=1.0 μ s					
@t=1.0 s	0.5				
Repetitive Peak Forward Surge Current	I_{FRM}	625			mA
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625			°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150			°C

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Forward Voltage	V_{FM}	-	1.0 1.25	V	$I_F=100mA$ $I_F=200mA$
Reverse Current BAV19WSG BAV20WSG BAV21WSG	I_R	-	0.1 0.1 0.1	μA	$V_R=100V$ $V_R=150V$ $V_R=200V$
Capacitance between terminals	C_T	-	5	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	50	ns	$I_F=I_R=30mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

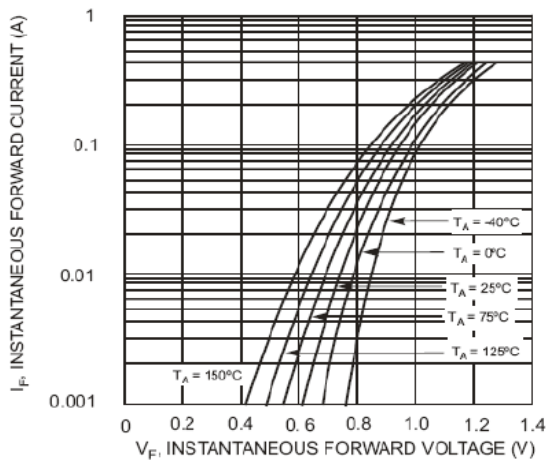


Fig. 1 Typical Forward Characteristics

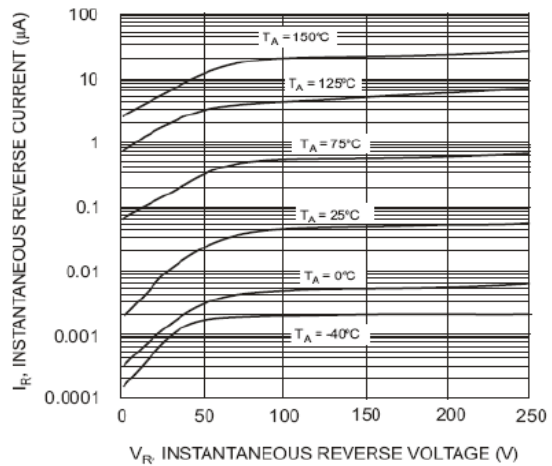


Fig. 2 Typical Reverse Characteristics

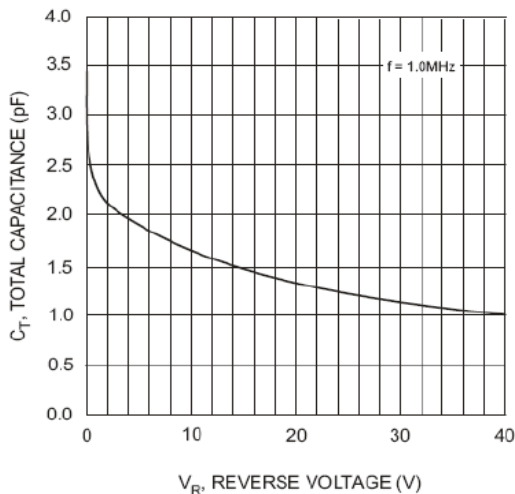


Fig. 3 Typical Capacitance vs. Reverse Voltage

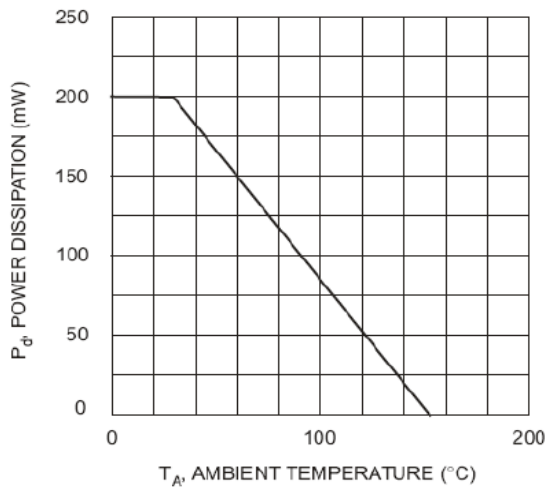


Fig. 4 Power Derating Curve, Total Package