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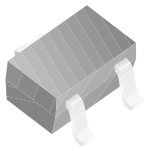
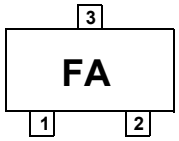
SEMICONDUCTOR®

April 2005

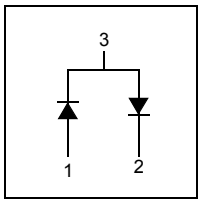
BAV99WT1G
Small Signal Diode



SOT-323



Connection Diagram



Absolute Maximum Ratings * T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Unit
V_{RRM}	Maximum Repetitive Reverse Voltage	70	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current Pulse Width = 1.0 second Pulse Width = 1.0 microsecond	 1.0 2.0	 A A
T_{STG}	Storage Temperature Range	-65 to +150	°C
T_J	Operating Junction Temperature	150	°C

Thermal Characteristics

Symbol	Parameter	Value	Unit
P_D	Power Dissipation	270	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	460	°C/W

FR-4 board (3.0 × 4.5 × 0.062" by 1.0 × 0.5" land pads)

Electrical Characteristics T_C = 25°C unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max	Units
V_R	Breakdown Voltage	I_R = 100μA	70		V
V_F	Forward Voltage	I_F = 1.0mA I_F = 10mA I_F = 50mA I_F = 150mA		715 855 1.0 1.25	mV mV V V
I_R	Reverse Leakage	V_R = 70V V_R = 25V, T_A = 150°C V_R = 70V, T_A = 150°C		2.5 50 70	μA μA μA
C_T	Total Capacitance	V_R = 0V, f = 1.0MHz		2.0	pF
t_{rr}	Reverse Recovery Time	I_F = I_R = 10mA, I_{RR} = 1.0mA, R_L = 100Ω		6.0	ns

Typical Performance Characteristics

Figure 1. Power Voltage Characteristics

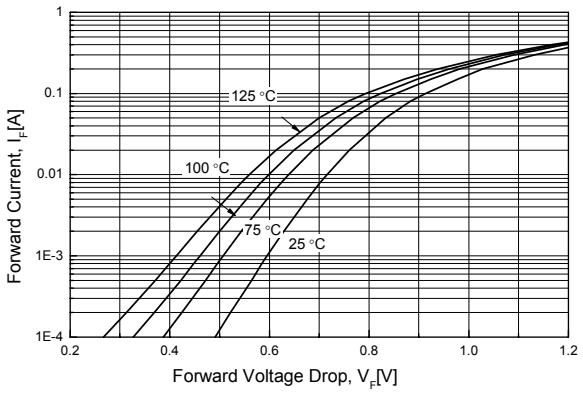


Figure 2. Reverse Current vs Reverse Voltage

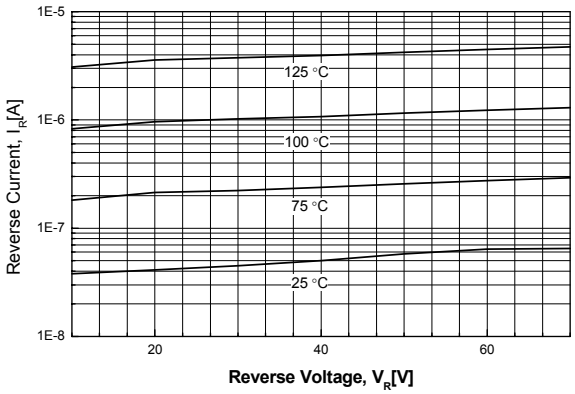


Figure 3. Total Capacitance

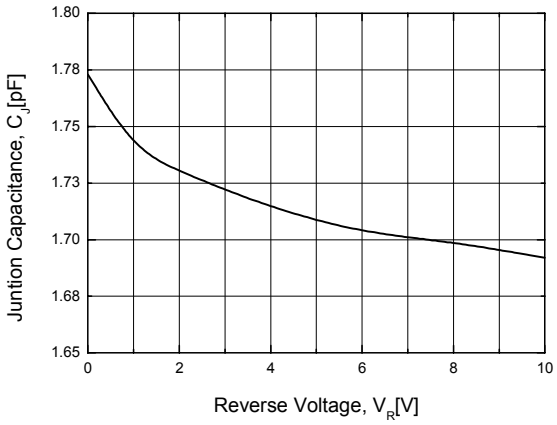
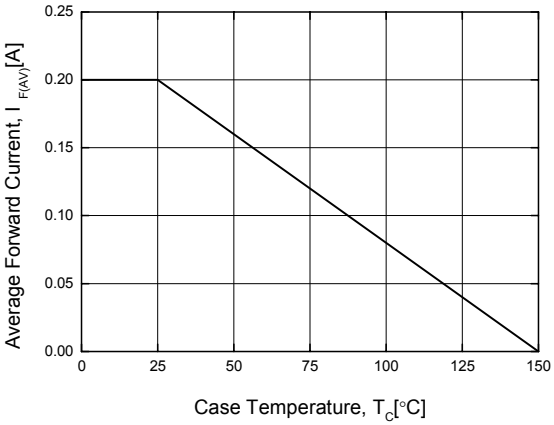


Figure 4. Power Derating Curve



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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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Datasheet Identification	Product Status	Definition
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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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Rev. I15

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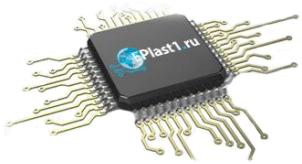
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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