DESCRIPTION

The BAV99L is available in SOT-23 Package.

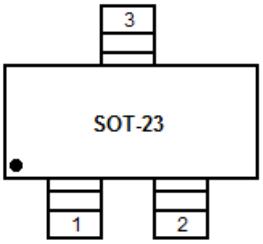
FEATURES

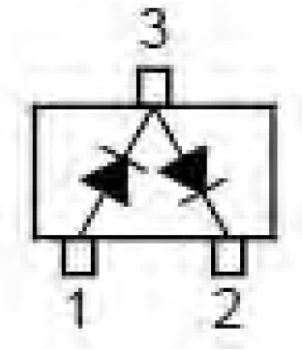
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Available in SOT-23 Package

ORDERING INFORMATION

Package Type	Part Number
SOT-23	BAV99L
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS

T_A = 25°C

V_{RRM}, Repetitive Peak Reverse Voltage	70V
V_R, Continuous Reverse Voltage	70Vdc
I_F, Forward Current	215mAdc
$I_{F(AV)}$, Continuous Forward Current (Single Diode Loaded)	715mA
I_{FRM}, Repetitive Peak Forward Current	450mA
I_{FSM}, Non-Repetitive Peak Forward Surge Current	
t = 1.0μs	4.5A
t = 1.0ms	1.0A
t = 1.0s	0.5A
P_D, Power Dissipation	300mW
T_J, Junction Temperature	150°C
T_{STG}, Storage Temperature Range	-65°C ~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_A = 25°C

Parameter	Symbol	Conditions	Min	Max	Unit
Forward Voltage	V_F	I_F = 1.0mAdc	-	715	mVdc
		I_F = 10mAdc	-	855	
		I_F = 50mAdc	-	1000	
		I_F = 150mAdc	-	1250	
Reverse Current	I_R	V_R = 70Vdc	-	2.5	nA
		V_R = 75V	-	1	μA
		V_R = 25Vdc, T_J = 150°C	-	30	
		V_R = 70V, T_J = 150°C	-	50	
Diode Capacitance	C_D	V_R = 0, f = 1.0MHz	-	1.5	pF
Reverse Recovery Time	t_{rr}	I_F = I_R = 10mAdc, $i_{R(REC)}$ = 1.0mAdc, R_L = 100Ω	-	6.0	ns
Forward Recovery Voltage	V_{FR}	I_F=10mA, t_r=20ns		1.75	V

TYPICAL CHARACTERISTICS

Figure 1. Forward Voltage

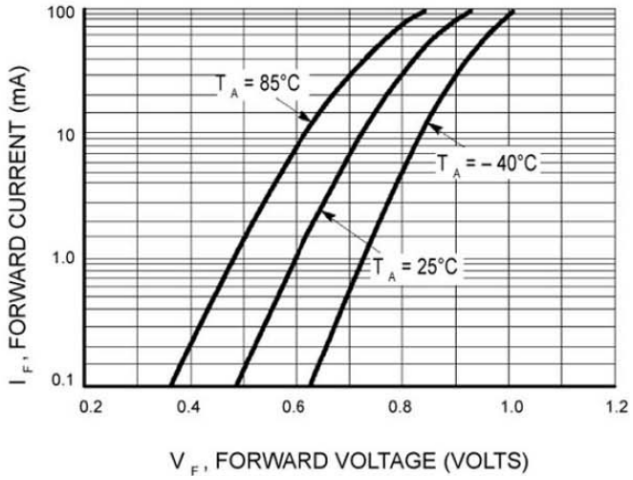


Figure2. Leakage Current

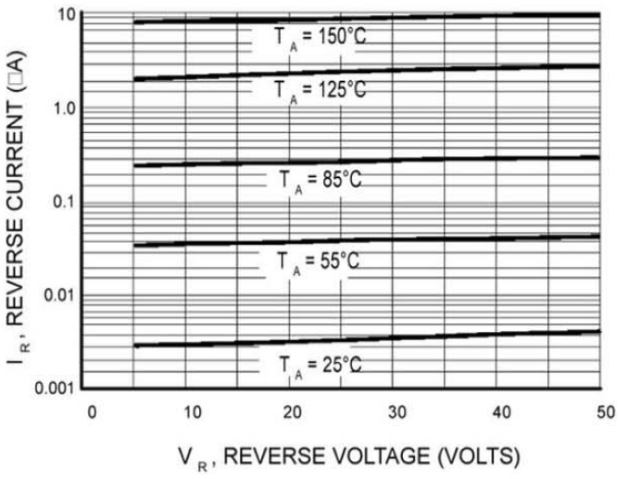
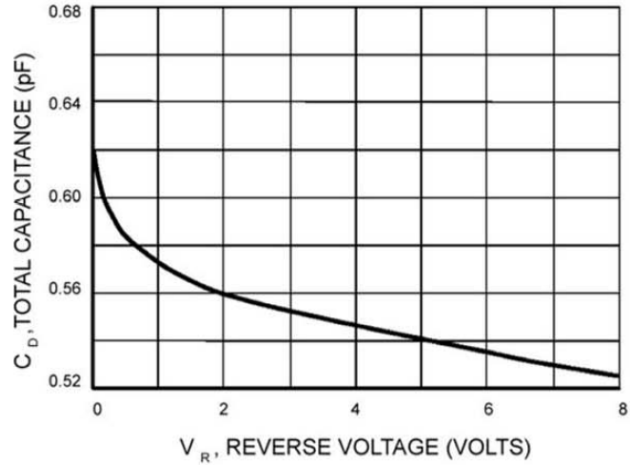
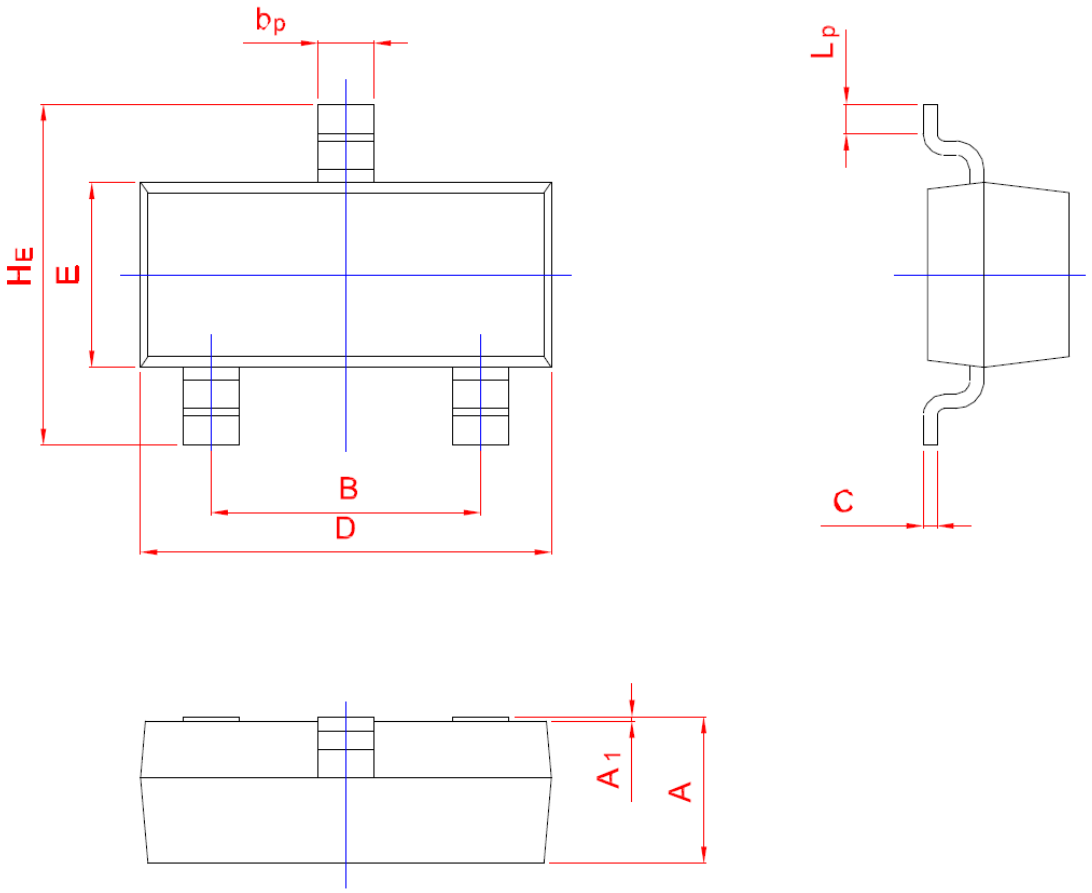


Figure 3. Capacitance



PACKAGE INFORMATION

Dimension in SOT-23 Package (Unit: mm)



UNIT	A	B	b_P	C	D	E	H_E	A_1	L_P
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20

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