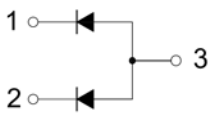


Features

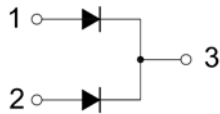
- Fast switching speed
- High conductance
- For general Purpose switching applications



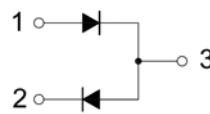
Configurations



BAV23A



BAV23C



BAV23S

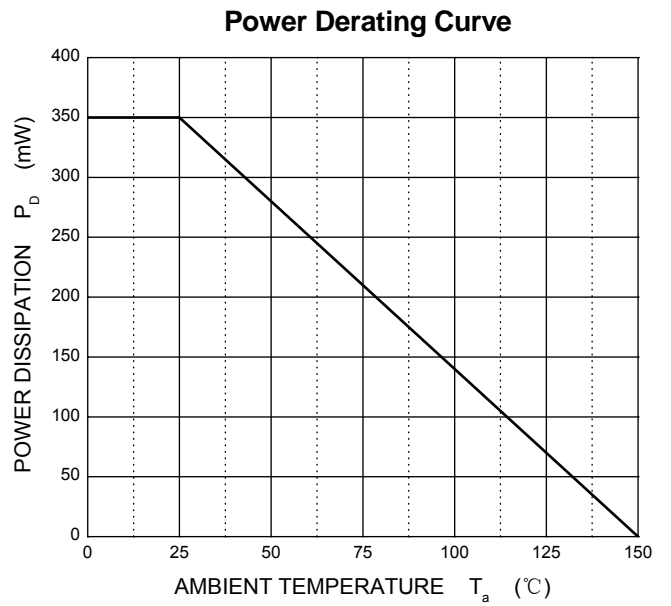
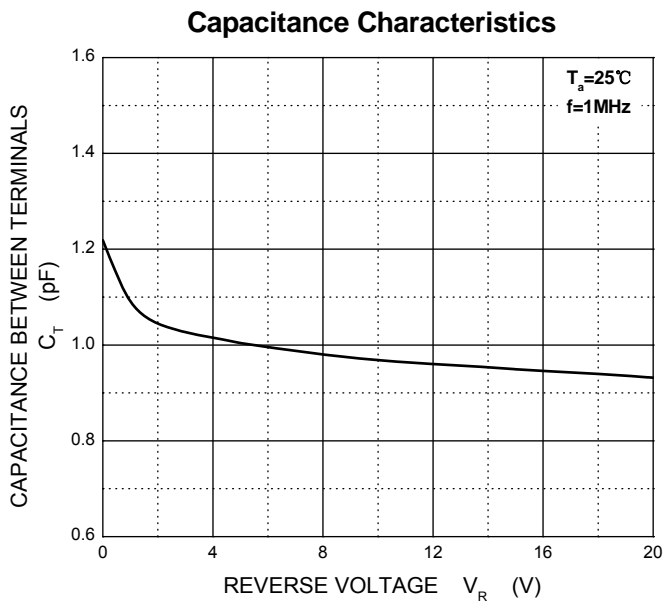
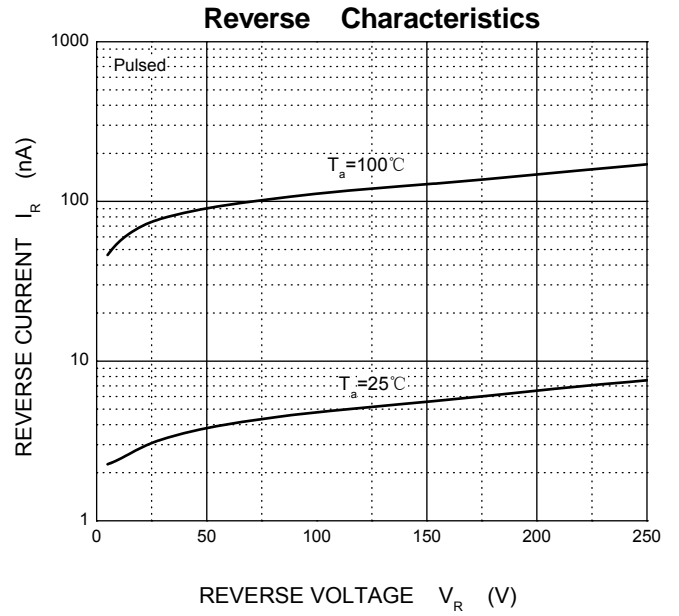
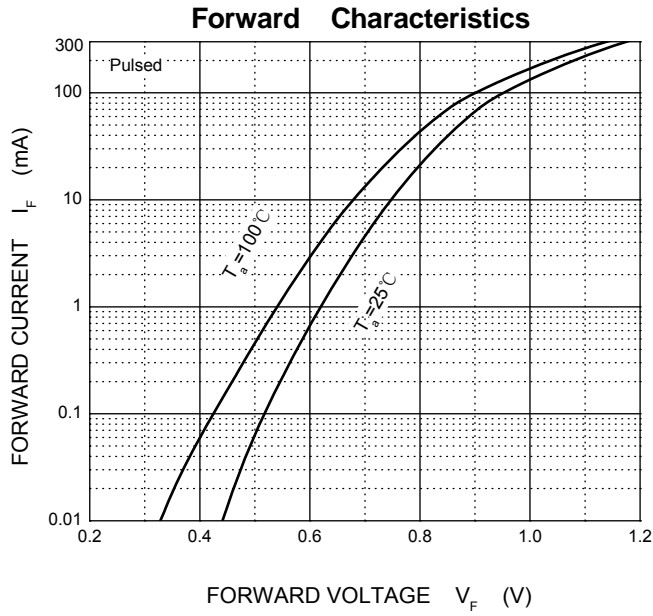
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage	V_{RWM}		
RMS Reverse Voltage	$V_{R(RMS)}$	175	V
Average Rectified Output Current	I_D	225	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1.7	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

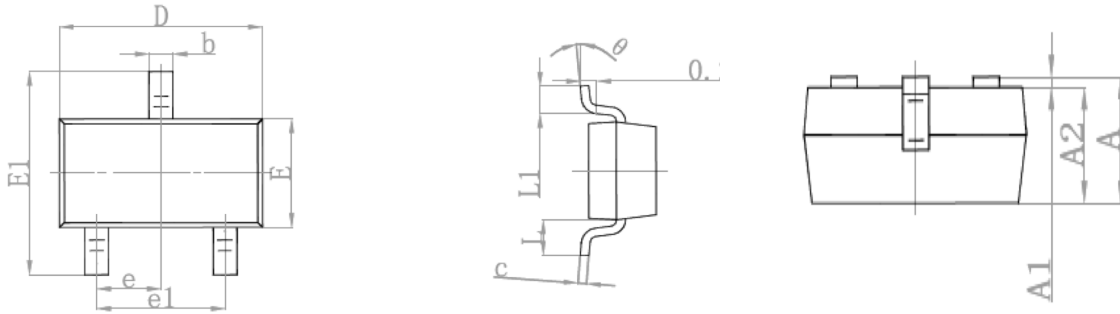
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	250	-	-	V
Reverse Current	I_R	$V_R=250\text{V}$	-	-	0.1	μA
Forward Voltage	V_F	$I_F=100\text{mA}$	-	-	1	V
		$I_F=200\text{mA}$	-	-	1.25	V
Total Capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$	-	-	5	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=30\text{mA},$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$	-	-	50	nS

Typical Electrical Characteristic Curves



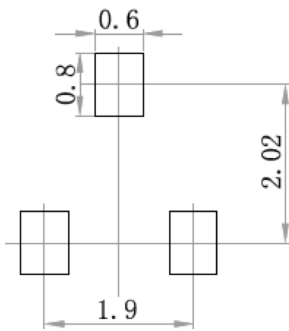
Package Outline Dimensions

SOT-23



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:
 1. Controlling dimension: in millimeters.
 2. General tolerance: ± 0.05mm.
 3. The pad layout is for reference purposes only.