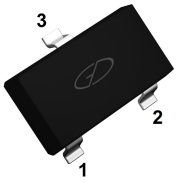
GOOD-ARK
SEMICONDUCTOR

BAV23x Series
Switching Diode

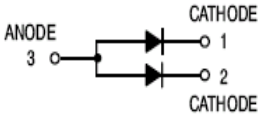
Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- High conductance

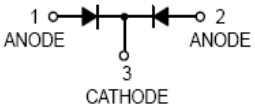


SOT-23

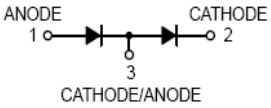
Configurations



BAV23A



BAV23C



BAV23S

Absolute Maximum Ratings

(T_A=25°C unless otherwise noted)

Characteristic	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage DC Reverse Voltage	V_{RWM} V_R	200	V
RSM Reverse Voltage	$V_{R(RMS)}$	141	V
Forward Continuous Current (Max.)	I_{FM}	400	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0μs @ t = 100μs @ t = 10ms	I_{FSM}	 9.0 3.0 1.7	A
Repetitive Peak Forward Surge Current	I_{FRM}	625	mA
Power Dissipation	P_d	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C /W
Operating Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

Electrical Characteristics (T_A=25°C unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	250	-	V	I_R=100μA
Reverse Leakage Current	I_R	-	100	nA	V_R=200V
Forward Voltage	V_F	-	1 1.25	V	I_F=100mA I_F=200mA
Total Capacitance	C_T	-	5.0	pF	V_R=0V, f=1.0MHz
Reverse Recovery Time	t_{rr}	-	50	ns	I_F=I_R=30mA, I_{rr}=0.1*I_R ,R_L=100Ω

Typical Electrical Characteristic Curves

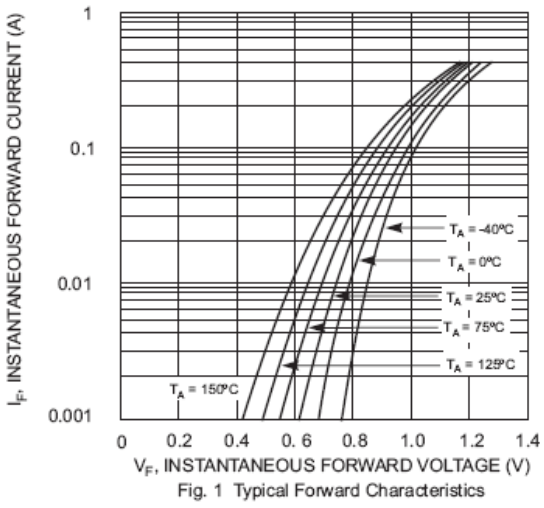


Fig. 1 Typical Forward Characteristics

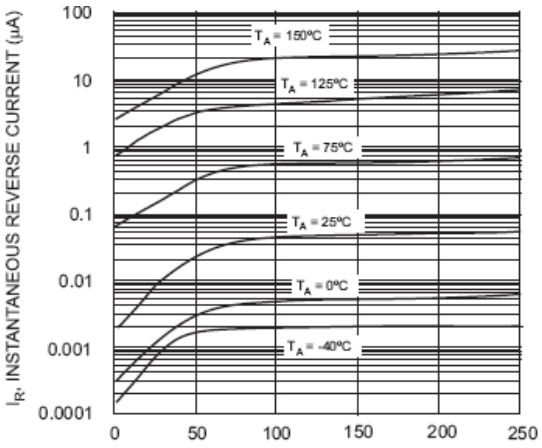


Fig. 2 Typical Reverse Characteristics

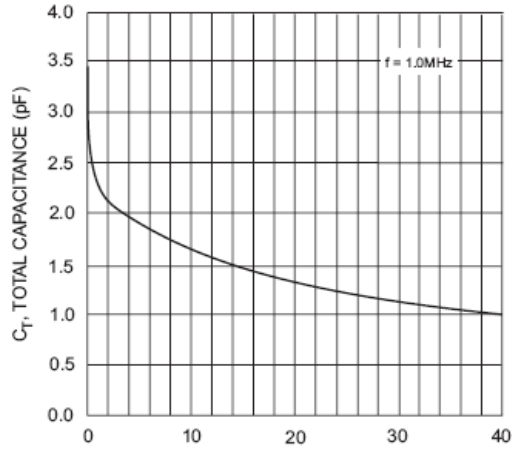


Fig. 3 Typical Capacitance vs. Reverse Voltage

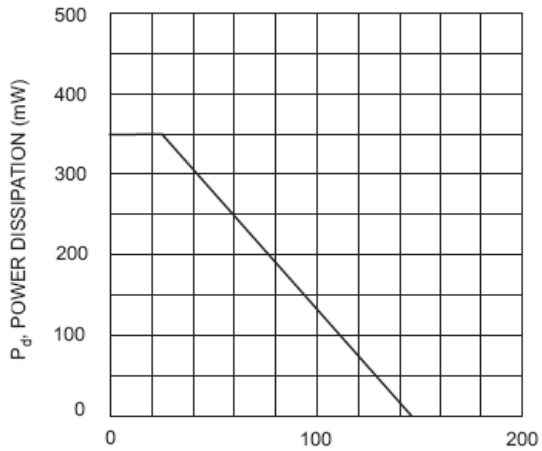
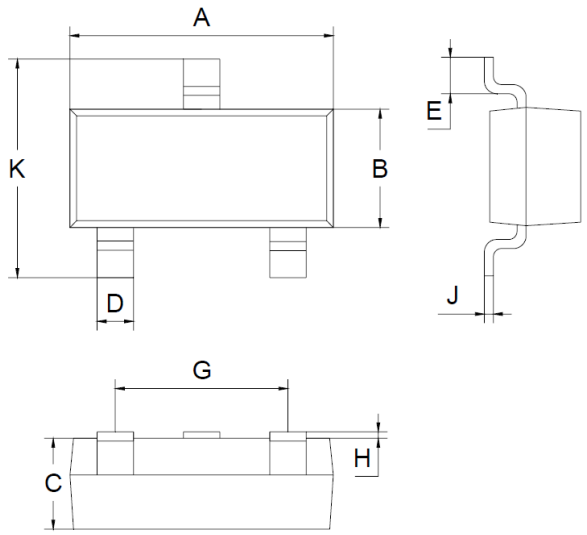


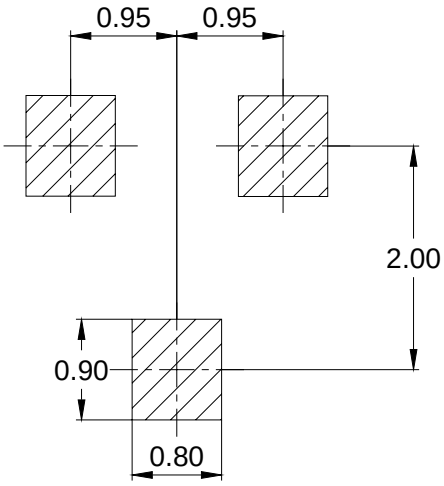
Fig. 4 Power Dissipation Derating

Package Outline Dimensions



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

Soldering Footprint



Unit : mm

Marking and Package Information

Part	Marking	Shipping
BAV23A	KT7	3000/Tape&Reel
BAV23C	KT6	3000/Tape&Reel
BAV23S	KL31	3000/Tape&Reel