

## Surface mount switching diode

## BAV23A/C/S

### FEATURES

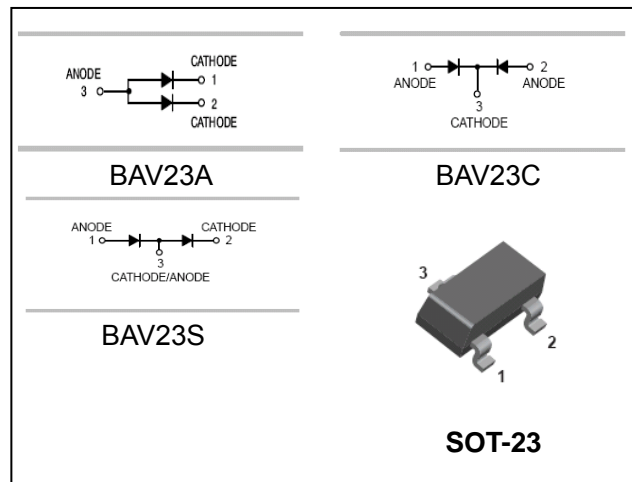
- Fast switching speed.
- Surface mount package ideally suited for Automatic insertion.
- For general purpose switching applications.
- High conductance.



Lead-free

### APPLICATIONS

- High speed switching application.



### ORDERING INFORMATION

Type No.	Marking	Package Code
BAV23A	KT7	SOT-23
BAV23C	KT6	SOT-23
BAV23S	KL31	SOT-23

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

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 Air	$R_{\theta JA}$	357	°C/W
Operating Junction Temperature Range	$T_j$	150	°C
Storage Temperature Range	$T_{STG}$	-65 to +150	°C



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## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	MAX	UNIT	Test Condition
Reverse breakdown Voltage	$V_{(BR)R}$	250	-	V	$I_R=100\mu A$
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	$I_F=I_R=30mA, t_{rr}=0.1 \cdot I_R$ $R_L=100\Omega$

## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

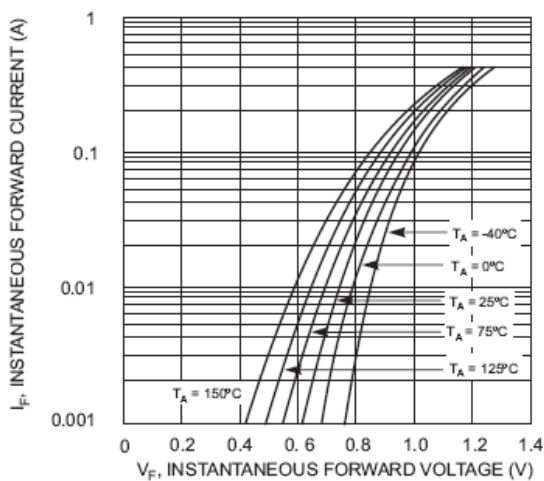


Fig. 1 Typical Forward Characteristics

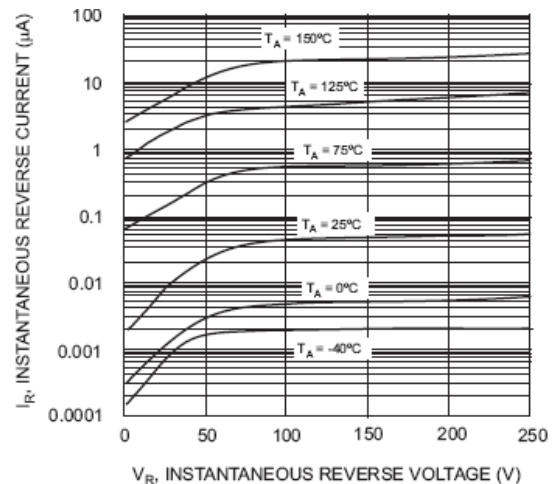


Fig. 2 Typical Reverse Characteristics

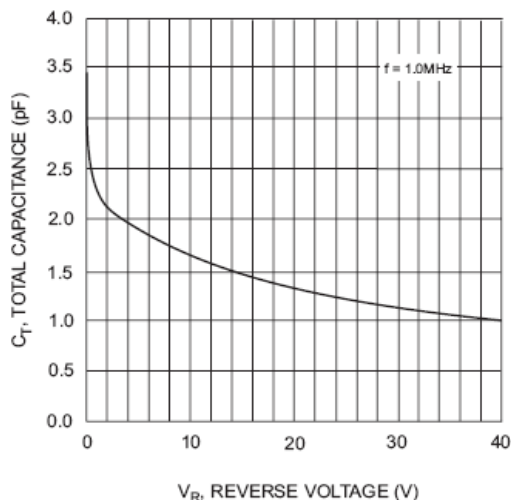


Fig. 3 Typical Capacitance vs. Reverse Voltage

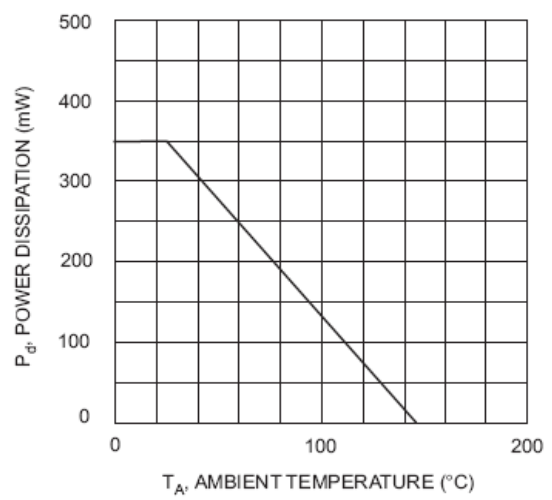


Fig. 4 Power Dissipation Derating

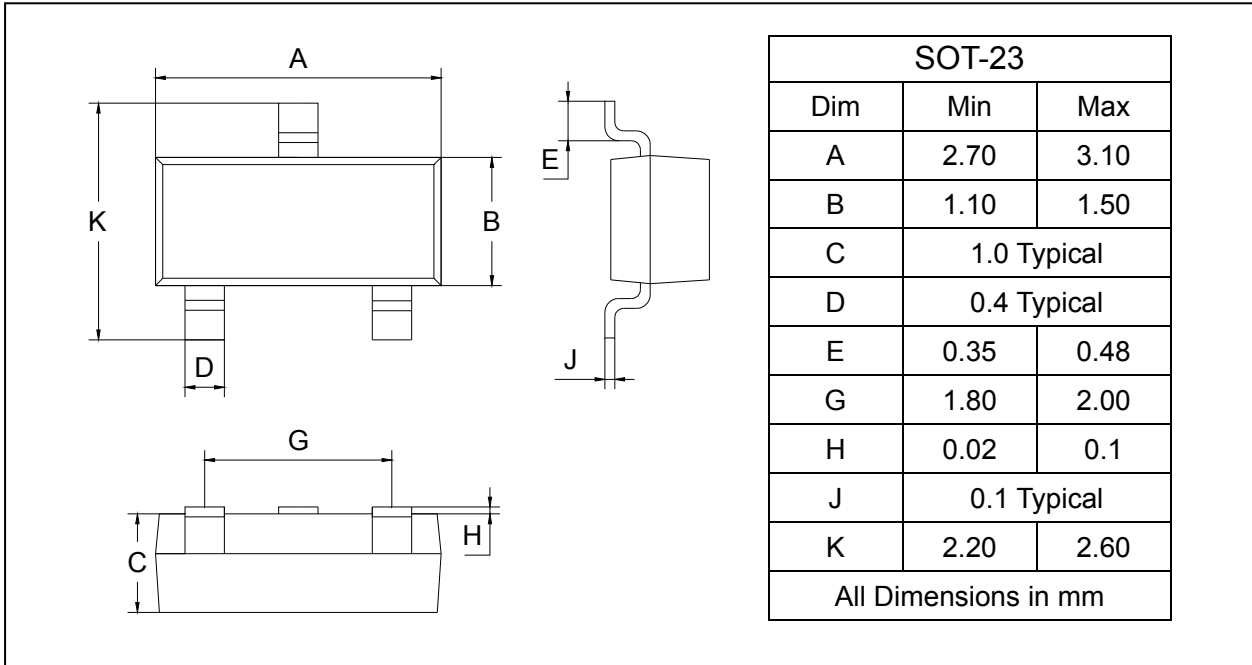
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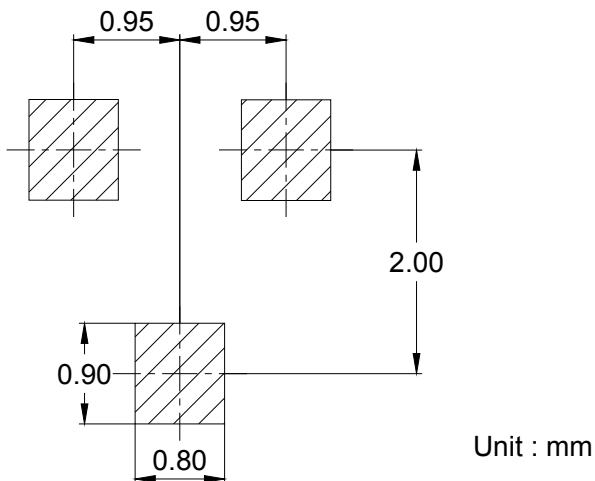
## PACKAGE OUTLINE

Plastic surface mounted package

SOT-23



## SOLDERING FOOTPRINT



## PACKAGE INFORMATION

Device	Package	Shipping
BAV23A/C/S	SOT-23	3000/Tape&Reel