

SOT-23 Plastic-Encapsulate Diodes

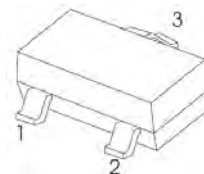
BAV23A/C/S

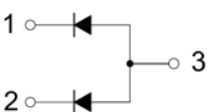
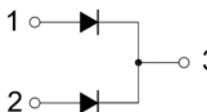
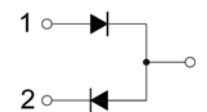
SCHOTTKY BARRIER DIODE

FEATURES

- Fast Switching Speed
- High Conductance
- For General Purpose Switching Applications
- **Pb-Free package is available**
RoHS product for packing code suffix "G"
Halogen free product for packing code suffix "H"
- Moisture Sensitivity Level 1

SOT-23



BAV23A	BAV23C	BAV23S
		
MARKING: KT7	MARKING: KT6	MARKING: KL31

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	250	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	175	V
I_O	Average Rectified Output Current	400	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ $t=1\mu\text{s}$	9	A
	@ $t=100\mu\text{s}$	3	A
	@ $t=10\text{ms}$	1.7	A
P_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	286	$^{\circ}\text{C}/\text{W}$
T_j	Operating Temperature	-55~+125	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	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	
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$			5	pF
Reverse recovery time	t_{rr}	$I_F=I_R=30\text{mA}, I_{rr}=0.1 \times I_R, R_L=100\Omega$			50	ns

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Typical Characteristics

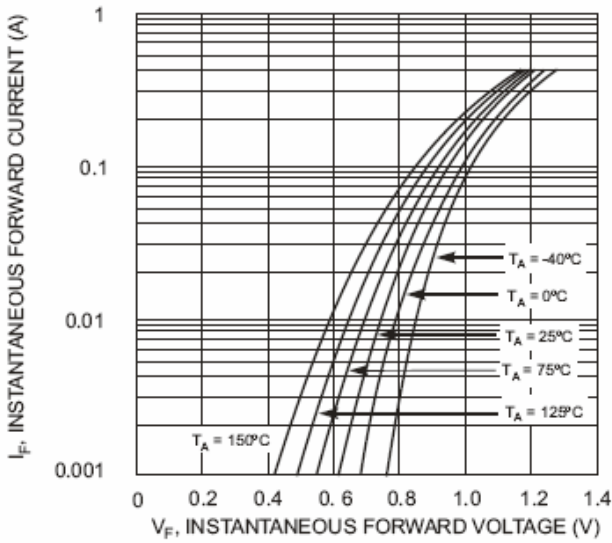


Fig. 1 Typical Forward Characteristics

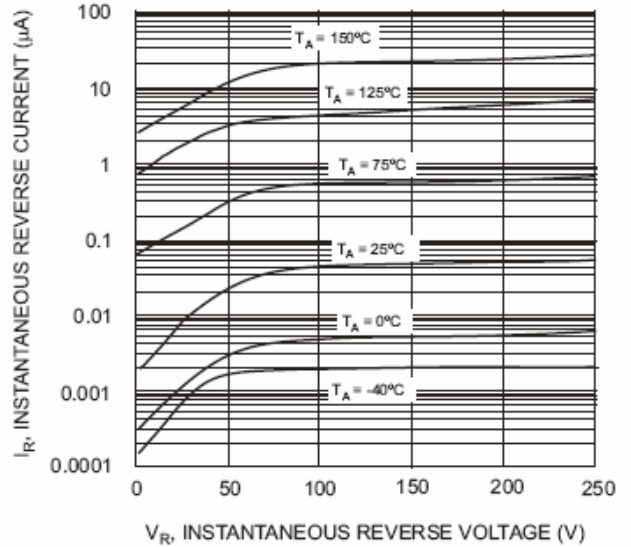


Fig. 2 Typical Reverse Characteristics

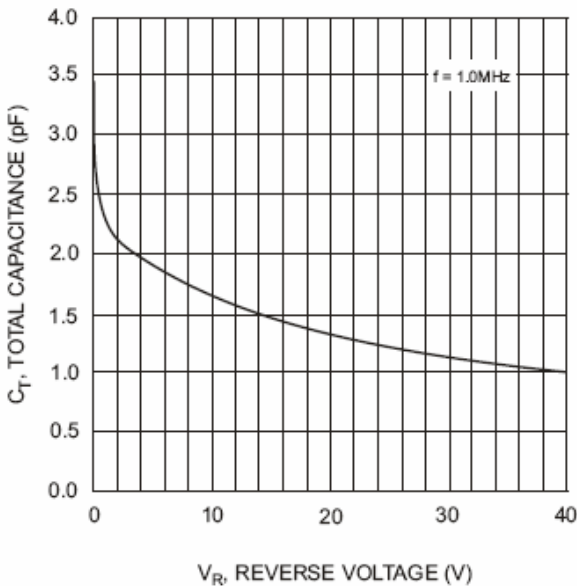


Fig. 3 Typical Capacitance vs. Reverse Voltage

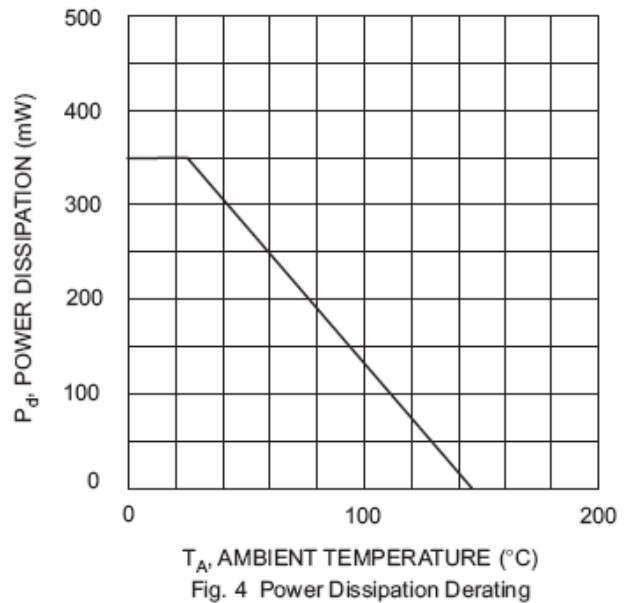
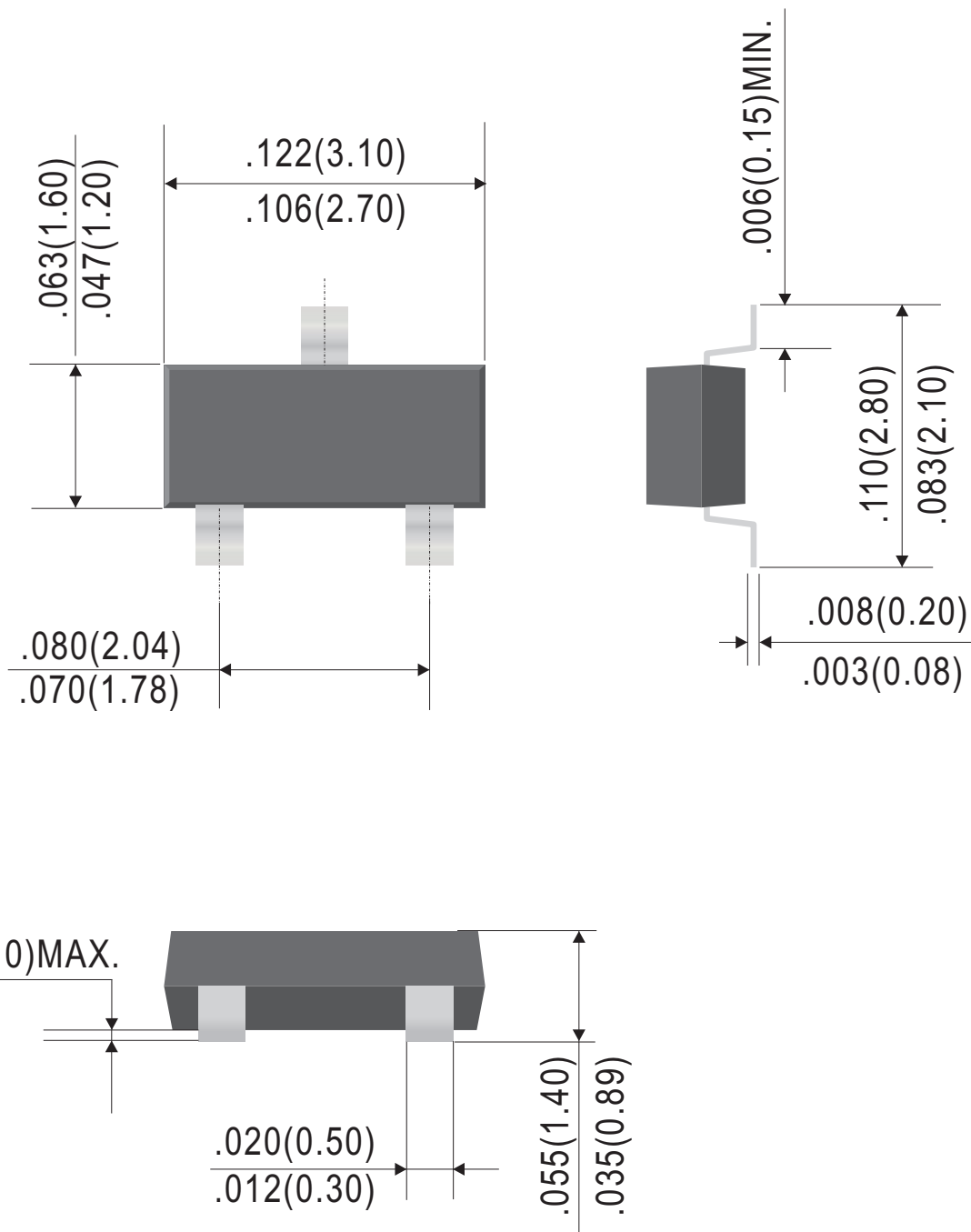


Fig. 4 Power Dissipation Derating

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Outline Drawing

SOT-23



Dimensions in inches and (millimeters)

Rev.D

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Ordering Information:

Device PN	Packing
Part Number-T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape&Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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