



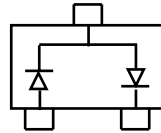
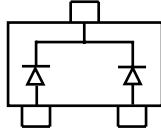
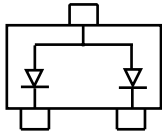
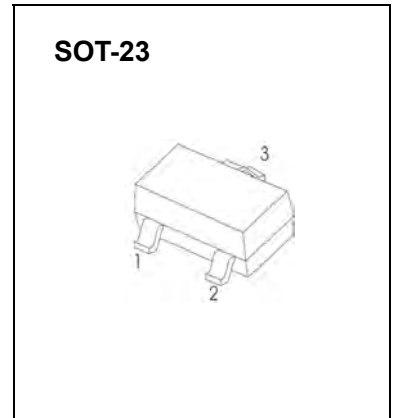
## SOT-23 Plastic-Encapsulate Diodes

**BAV70**  
**BAV99**  
**BAW56LT1**

### SWITCHING DIODE

#### FEATURES

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



BAW56LT1 Marking: A1

BAV70 Marking: A4

BAV99 Marking: A7

#### Maximum Ratings @Ta=25°C

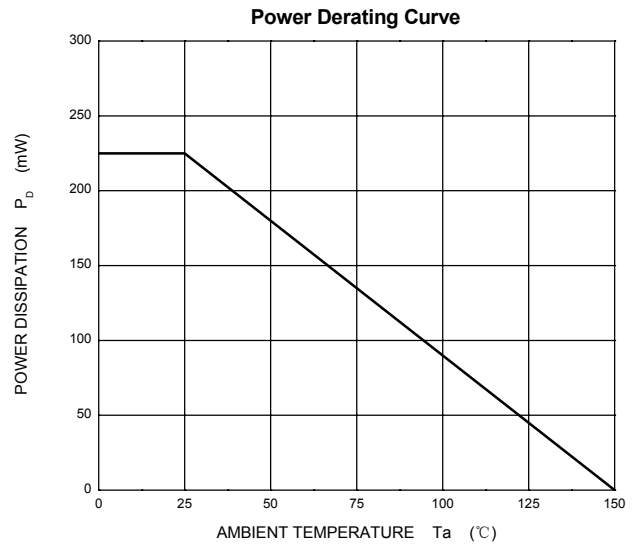
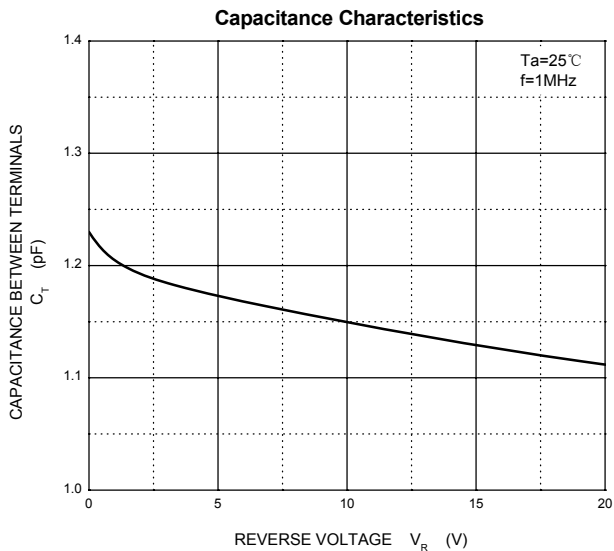
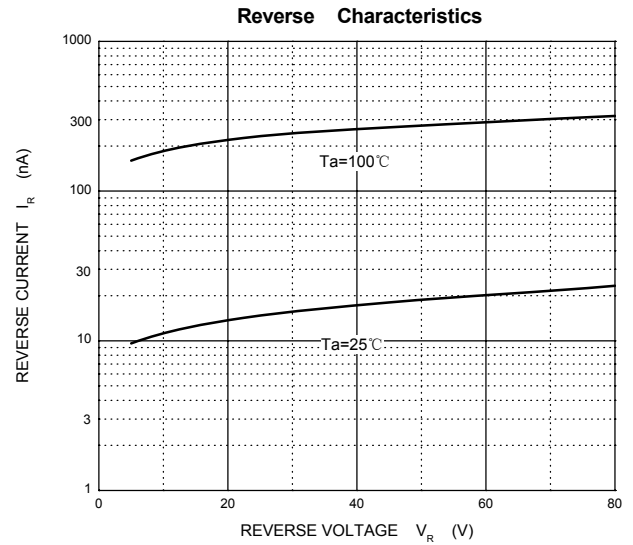
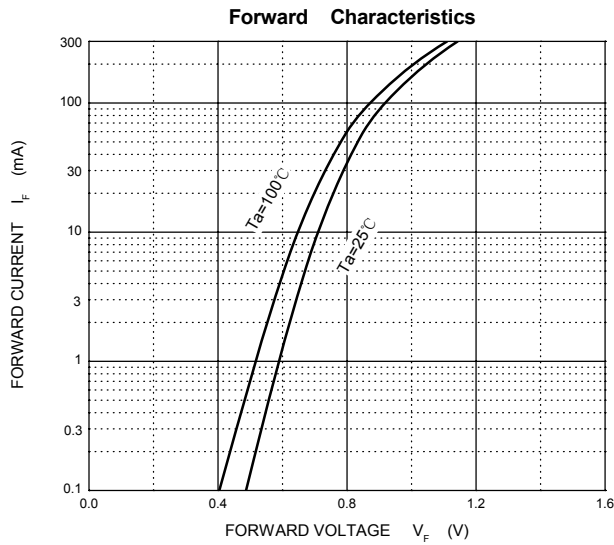
Parameter	Symbol	Limit	Unit
Reverse Voltage	$V_R$	70	V
Forward Current	$I_F$	200	mA
Peak Forward Surge Current	$I_{FM(surge)}$	500	mA
Power Dissipation	$P_D$	225	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	$T_J$	150	°C
Operating/Storage Temperature Range	$T_{STG}$	-55~+150	°C

#### Electrical Characteristics @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_R$	70			V	$I_R=100\mu A$
Forward voltage	$V_{F1}$			0.715	V	$I_F=1mA$
	$V_{F2}$			0.855	V	$I_F=10mA$
	$V_{F3}$			1	V	$I_F=50mA$
	$V_{F4}$			1.25	V	$I_F=150mA$
Reverse current	$I_R$			2.5	$\mu A$	$V_R=70V$
Capacitance between terminals	$C_T$			1.5	pF	$V_R=0, f=1MHz$
Reverse recovery time	$t_{rr}$			6	ns	$I_F = I_R = 10mA,$ $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$



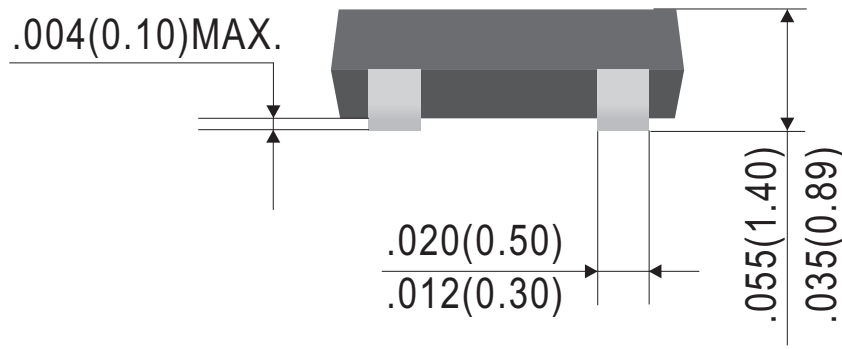
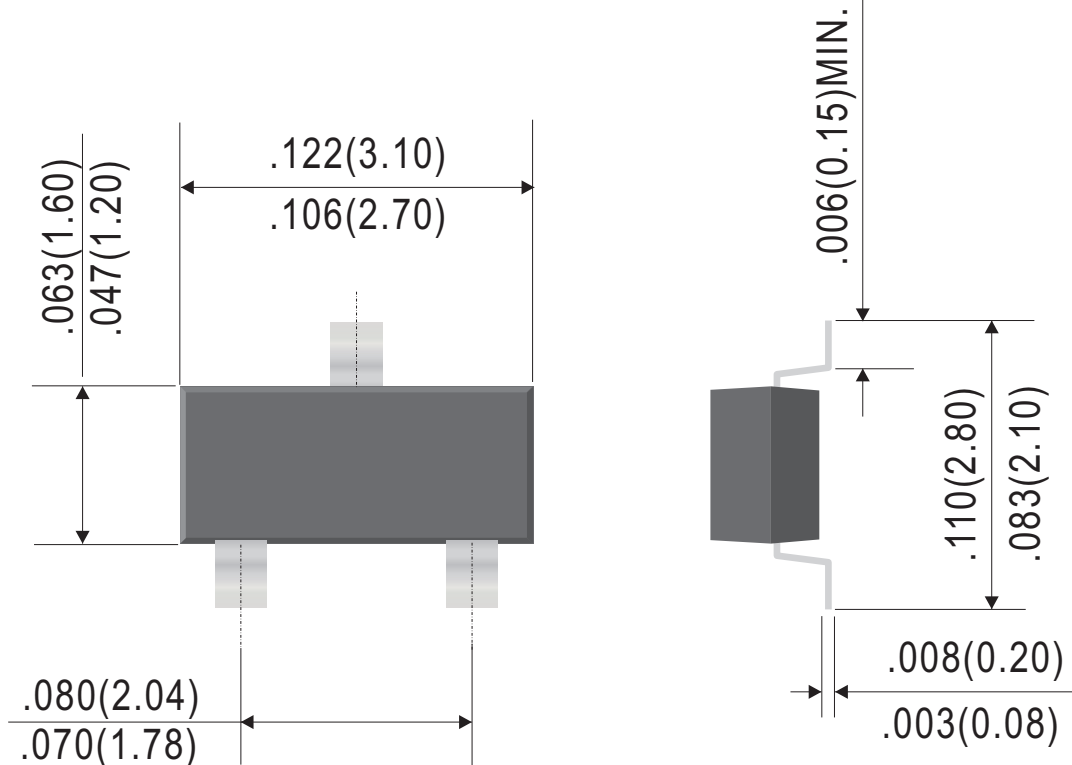
# Typical Characteristics





### Outline Drawing

### SOT-23



Dimensions in inches and (millimeters)



# WILLAS



## SOT-23 Plastic-Encapsulate Diodes

**BAV70**  
**BAV99**  
**BAW56LT1**

### Ordering Information:

Device PN	Packing
Part Number -T <sup>(1)</sup> G <sup>(2)</sup> -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"

### \*\*\*Disclaimer\*\*\*

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