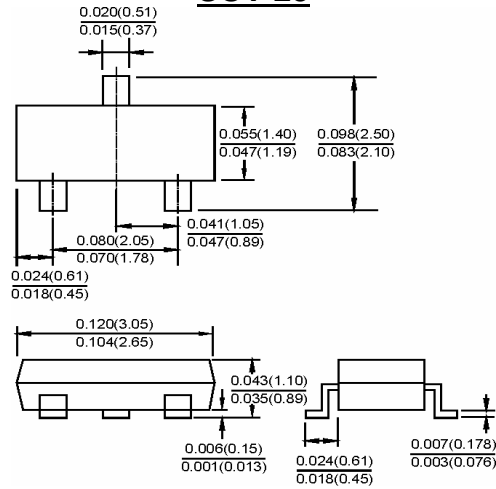




## SOT-23

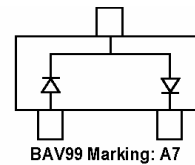
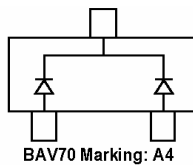
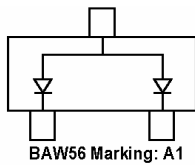


## Features

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

## Mechanical Data

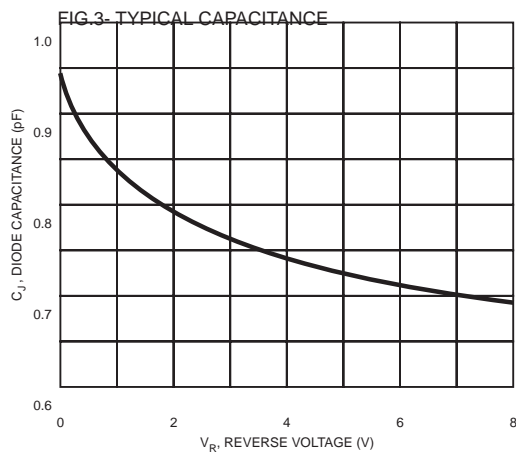
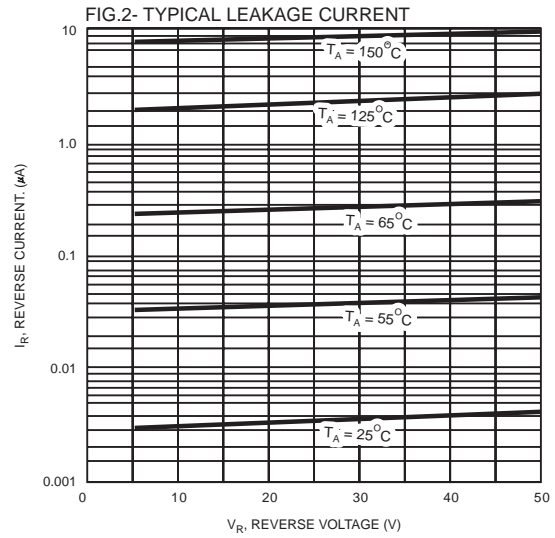
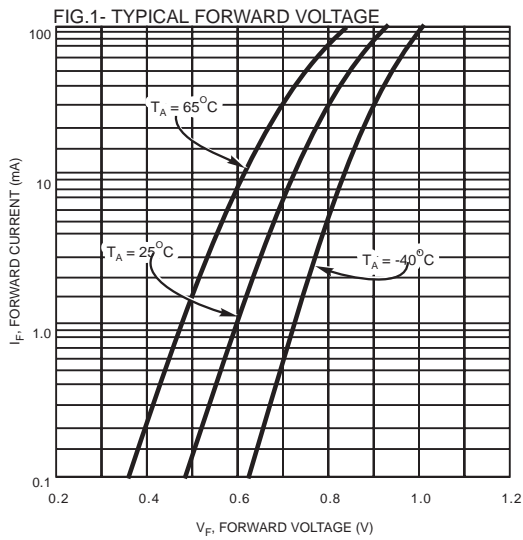
- ✧ Case: SOT-23, Molded plastic
- ✧ Marking: BAW56: A1, BAV70: A4, BAV99: A7
- ✧ Weight: 0.008 gram (approx.)



Maximum Ratings $T_A=25^{\circ}\text{C}$ unless otherwise specified				
Type Number	Symbol	BAW56/BAV70/BAV99	Units	
Reverse Voltage	$V_R$	75	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 Air	$R_{\theta JA}$	556	$^{\circ}\text{C}/\text{W}$	
Junction Temperature	$T_J$	150	$^{\circ}\text{C}$	
Storage Temperature Range	$T_{STG}$	-55 to 150	$^{\circ}\text{C}$	
Electrical Characteristics				
Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage $I_R=100\mu\text{A}$	$V_R$	75		V
Forward Voltage $I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$	$V_F$	-	0.715 0.855 1.0 1.25	V
Reverse Current $V_R=25\text{V}$ $V_R=75\text{V}$	$I_R$		30 2	nA uA
Capacitance between terminals $V_R=0, f=1.0\text{MHz}$	$C_j$	-	1.5	pF
Reverse Recovery Time (Note 1)	$t_{rr}$	-	6.0	nS

Note 1: Reverse Recovery Test Conditions:  $I_F=I_R=10\text{mA}$ ,  $I_{rr}=0.1 \times I_R$ ,  $R_L=100\Omega$ .

## RATINGS AND CHARACTERISTIC CURVES (BAW56/BAV70/BAV99)



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOT-23	3000/REEL	90000	40X20X22	5.00	4.00