



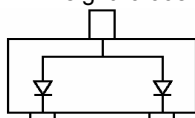
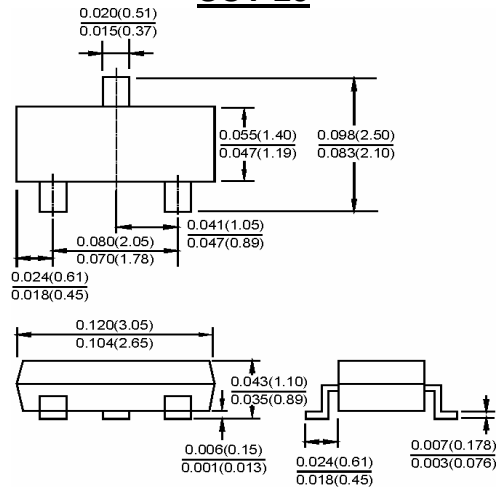
SOT-23

Features

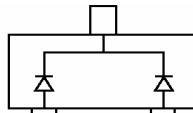
- ✧ Fast switching speed
- ✧ Surface mount package ideally suited for automatic insertion
- ✧ For general purpose switching applications
- ✧ High conductance

Mechanical Data

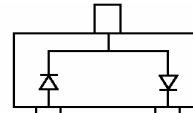
- ✧ Case: SOT-23, Molded plastic
- ✧ Terminals: Solderable per MIL-STD-202, Method 208
- ✧ Polarity: See diagram
- ✧ Marking: BAW56: A1, BAV70: A4, BAV99: A7
- ✧ Weight: 0.008 gram (approx.)



BAW56 Marking: A1



BAV70 Marking: A4



BAV99 Marking: A7

Maximum Ratings $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	BAW56/BAV70/BAV99	Units
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 Air	$R_{\theta JA}$	556	$^{\circ}\text{C/W}$
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	70		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 $V_R=70\text{V}$	I_R		2.5	μA
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 (BAW66/BAV70/BAV99)

