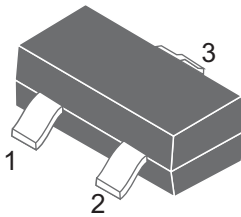
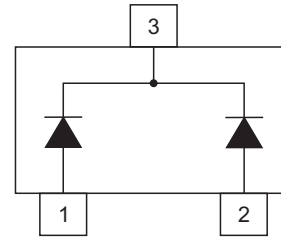


MONOLITHIC DUAL SWITCHING DIODE

SOT-23



Pin Configuration



Features

- We declare that the material of product compliant with RoHS requirements and Halogen Free

Mechanical Data

- **Case:** Molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

Device Marking And Ordering Information

Device	Marking	Shipping
BAV70	A4	3000pcs/Tape&Reel

Maximum & Thermal Characteristics Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Units
Reverse Voltage	V_R	70	V
Forward Current	I_F	200	mA
Peak Forward Surge Current	$I_{FM(surge)}$	500	mA
Total Device Dissipation FR-5 Board ⁽¹⁾ @ $T_A=25^\circ\text{C}$ Derate above 25°C	P_D	225 1.8	mW mW/ $^\circ\text{C}$
Thermal resistance junction to ambient ⁽¹⁾	$R_{\theta JA}$	556	$^\circ\text{C}/\text{W}$
Total Device Dissipation FR-5 Board ⁽²⁾ @ $T_A=25^\circ\text{C}$ Derate above 25°C	P_D	300 2.4	mW mW/ $^\circ\text{C}$
Thermal resistance junction to ambient ⁽²⁾	$R_{\theta JA}$	417	$^\circ\text{C}/\text{W}$
Junction temperature	T_J	-55~+150	$^\circ\text{C}$
Storage temperature	T_{STG}	-55~+150	$^\circ\text{C}$

Note :1.FR-5 = 1.0 x 0.75 x 0.062 in.

2.Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Units
Reverse Voltage Leakage Current ($V_R = 25\text{ Vdc}$, $T_J = 150^\circ\text{C}$) ($V_R = 70\text{ Vdc}$) ($V_R = 70\text{ Vdc}$, $T_J = 150^\circ\text{C}$)	I_R			60 2.5 100	μA
Reverse Breakdown Voltage ($I_{BR} = 100\ \mu\text{Adc}$)	V_{BR}	70			V
Forward Voltage ($I_F = 1.0\ \text{mA dc}$) ($I_F = 10\ \text{mA dc}$) ($I_F = 50\ \text{mA dc}$) ($I_F = 150\ \text{mA dc}$)	V_F			715 855 1000 1250	mV
Diode Capacitance ($V_R = 0$, $f = 1.0\ \text{MHz}$)	C_D			1.5	pF
Reverse Recovery Time ($I_F = I_R = 10\ \text{mA dc}$, $R_L = 100\ \Omega$)	t_{rr}			6	ns

Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 I_F vs. V_F

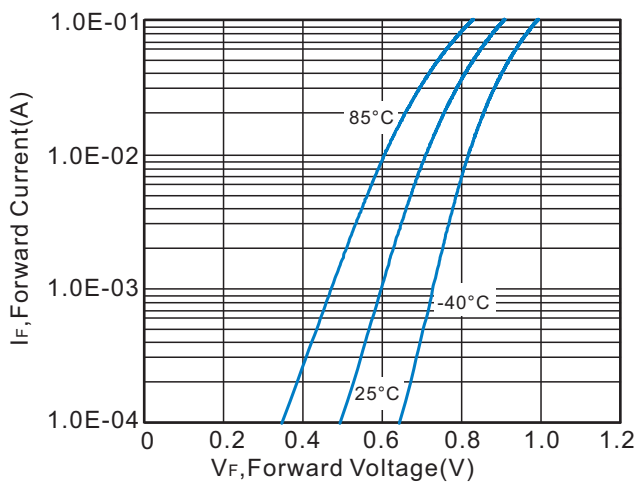


Fig.2 I_R vs. V_R

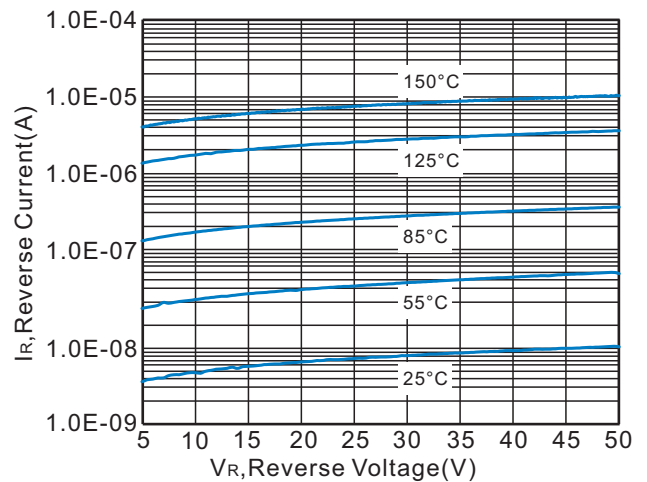
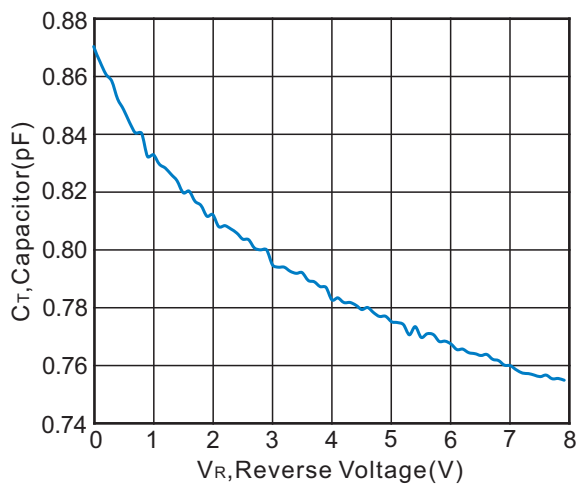
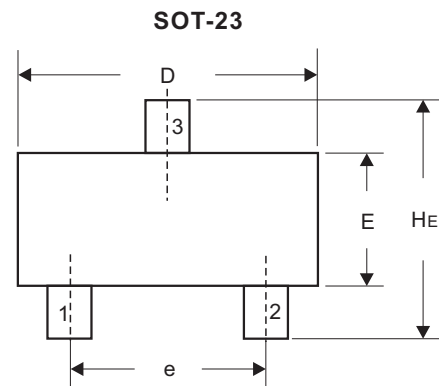


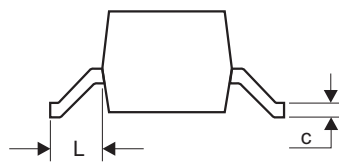
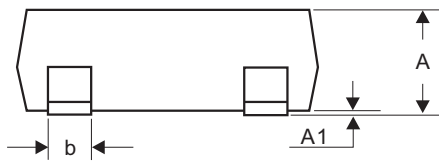
Fig.3 C_T vs. V_R



Dimensions(SOT-23)



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	0.89	1.11	0.035	0.044
A1	0.01	0.10	0.001	0.004
b	0.37	0.50	0.015	0.020
c	0.09	0.18	0.003	0.007
D	2.80	3.04	0.110	0.120
E	1.20	1.40	0.047	0.055
e	1.78	2.04	0.070	0.081
L	0.35	0.69	0.014	0.029
HE	2.10	2.64	0.083	0.104



Recommended Mounting Pad Layout

