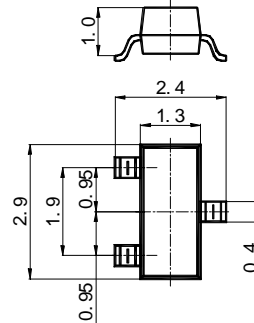
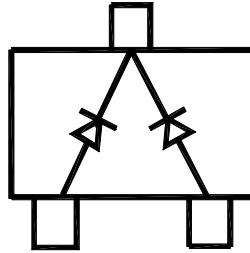


Mechanical Dimensions

Description

BAV70



SOT-23

Features

- High Conductance
- Fast Switchin
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose and Switching
- Plastic Material – UL Recognition Flammability Classification 94V-0

Mechanical Data

- Case: SOT-23, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.008 grams (approx.)
- Mounting Position: Any
- Marking: A4

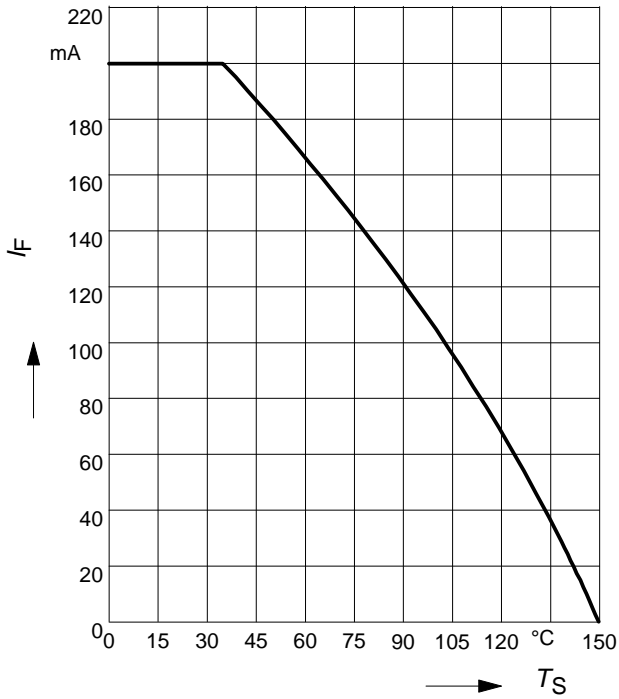
Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage	V_{RRM}	70	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
Forward Continuous Current (Note 1)	I_F	200	mA
Average Rectified Output Current (Note 1)	I_O	200	mA
Peak Forward Surge Current (Note 1)	I_{FSM}	1.0	Pulse Width=1.0 s
		2.0	Pulse Width=1.0 ms
Power Dissipation (Note 1)	P_d	225	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	357	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150	$^\circ\text{C}$

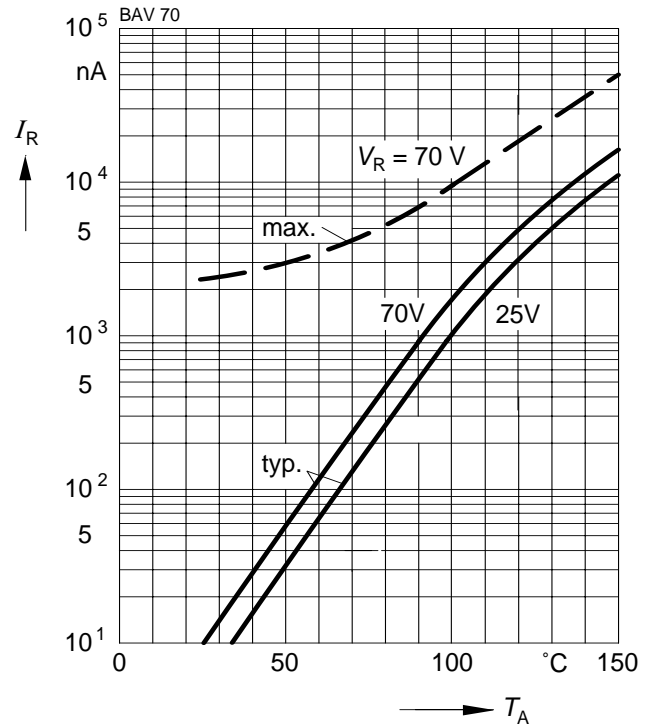
Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	70	—	V	@ $I_{RS} = 100\mu\text{A}$
Forward Voltage	V_F	—	1.0	V	@ $I_F = 50\text{mA}$
Reverse Leakage Current	I_R	—	2.5	μA	@ $V_R = 70\text{V}$
Junction Capacitance	C_j		1.5	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	6.0	nS	$I_F = I_R = 10\text{mA}, I_{RR} = 0.1 \times I_R, R_L = 100\Omega$

Forward current $I_F = f(T_S)$

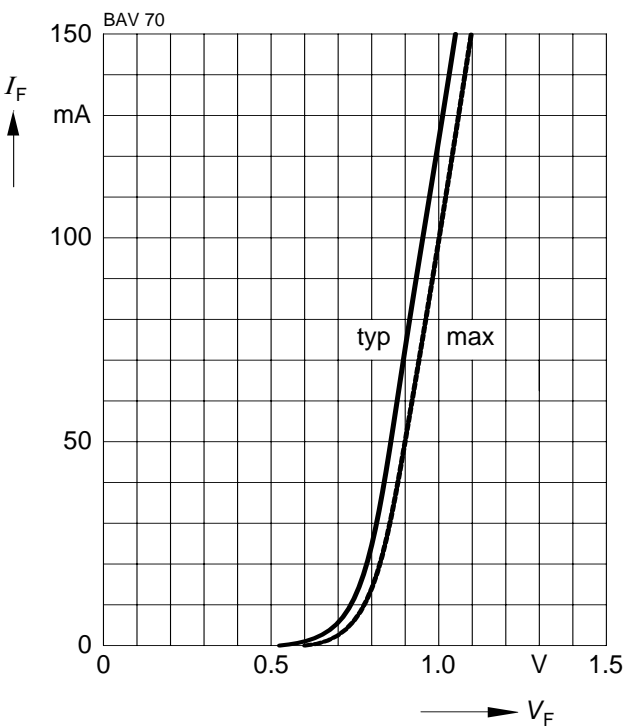


Reverse current $I_R = f(T_A)$



Forward current $I_F = f(V_F)$

$T_A = 25^\circ\text{C}$



Peak forward current $I_{FM} = f(t_p)$

$T_A = 25^\circ\text{C}$

