

Dual surface mount switching diode

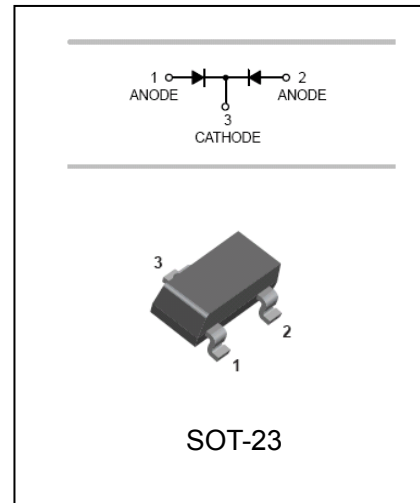
**BAV70**

**FEATURES**

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



Lead-free



**APPLICATIONS**

- Small signal switching

**ORDERING INFORMATION**

Type No.	Marking	Package Code
BAV70	A4	SOT-23

**MAXIMUM RATING @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	$V_{RM}$	100	V
Peak repetitive reverse voltage	$V_{RRM}$	75	V
Working peak reverse voltage	$V_{RWM}$		
DC Reverse Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Average rectified output current	$I_O$	150	mA
Repetitive Peak Forward current	$I_{FRM}$	450	mA
Non-repetitive forward Surge Current	$I_{FSM}$	2.0	A
@t=1.0μs		1.0	
@t=1.0s			
Power Dissipation	$P_d$	350	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	357	°C/W
Junction temperature	$T_j$	150	°C
Storage temperature range	$T_{stg}$	-65 to +150	°C

**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

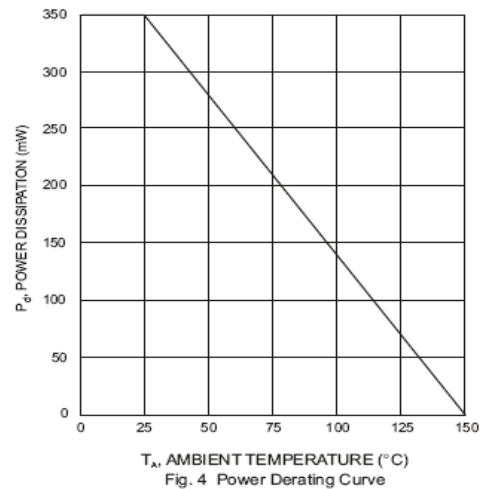
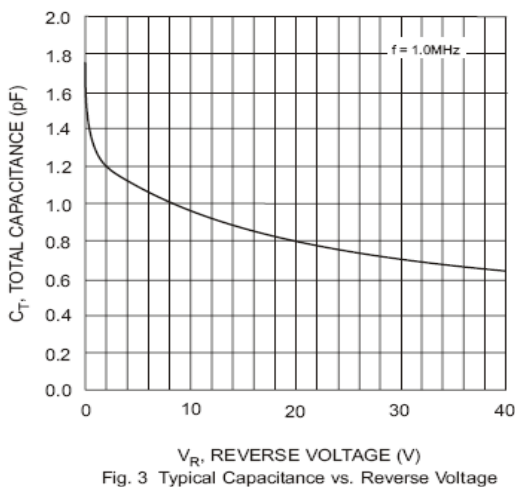
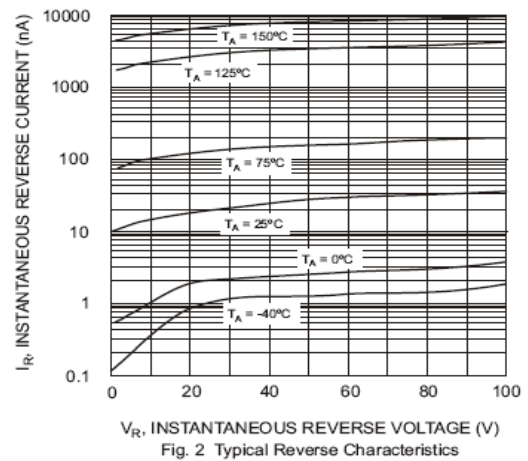
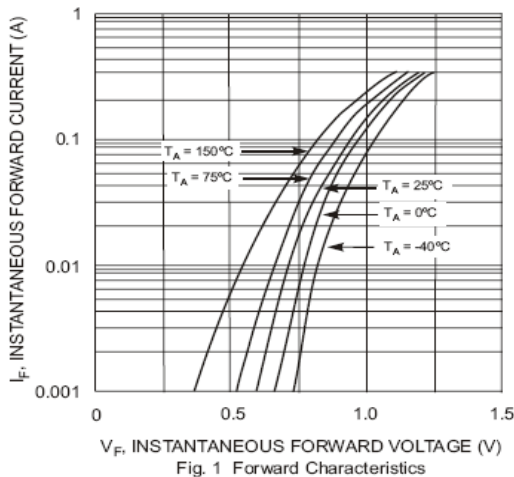


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Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 2.5\mu A$	75		V
Reverse voltage leakage current	$I_R$	$V_R = 75V$		2.5	$\mu A$
		$V_R = 20V$		25	nA
		$V_R = 75V, T_j = 150^\circ C$		50	$\mu A$
		$V_R = 25V, T_j = 150^\circ C$		30	$\mu A$
Forward voltage	$V_F$	$I_F = 1mA$		715	mV
		$I_F = 10mA$		855	
		$I_F = 50mA$		1000	
		$I_F = 150mA$		1250	
Total capacitance	$C_T$	$V_R = 0V, f = 1MHz$		2.0	pF
Reverse recovery time	$t_{rr}$	$I_F = I_R = 10mA, I_R = 1mA, V_R = 5V, R_L = 100\Omega$		4	ns

TYPICAL CHARACTERISTICS @  $T_a = 25^\circ C$  unless otherwise specified



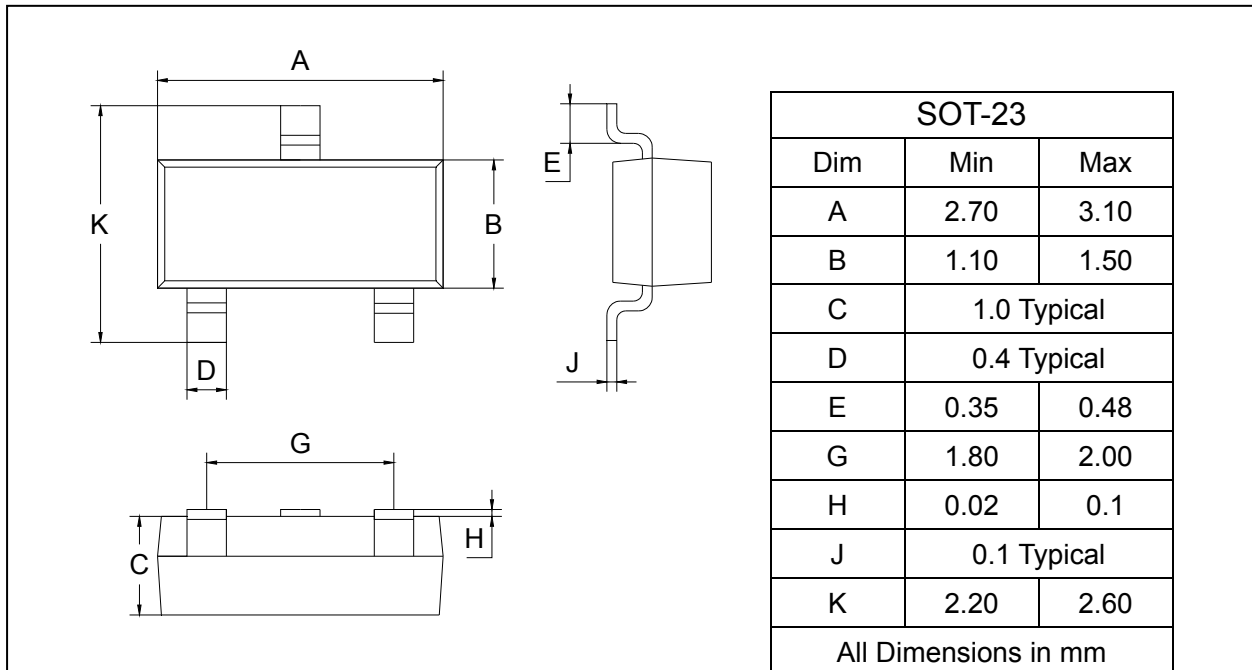
PACKAGE OUTLINE

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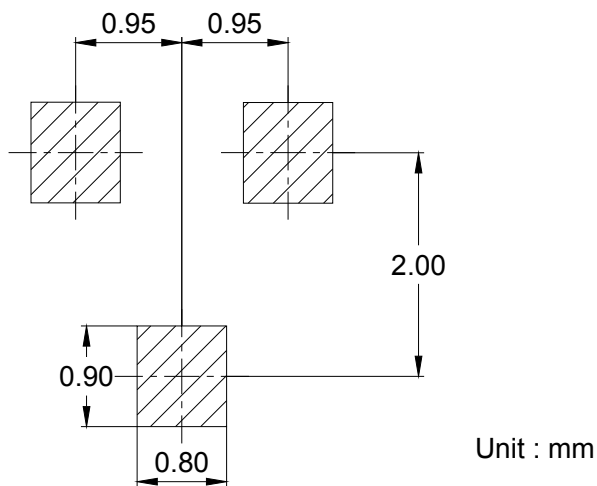
**BAV70**

Plastic surface mounted package

SOT-23



**SOLDERING FOOTPRINT**



**PACKAGE INFORMATION**

Device	Package	Shipping
BAV70	SOT-23	3000/Tape&Reel