

BAV70

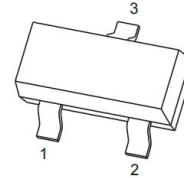
Switching Diode

FEATURE

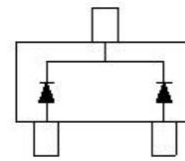
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Low Current Leakage
- Small Outline Surface Mount Package
- RoHS compliant / Green EMC

MARKING: A4

SOT-23



Schematic diagram



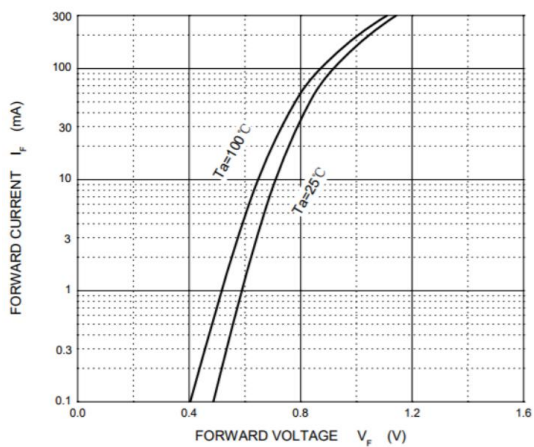
ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Average Rectified Output Current	I_O	150	mA
Power Dissipation	P_{tot}	350	mW
Peak Forward Surge Current @ $t=1.0\text{S}$ Non-Repetitive	I_{FSM}	1.0	A
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to 150	$^{\circ}\text{C}$
Thermal Resistance	R	357	$^{\circ}\text{C}/\text{W}$

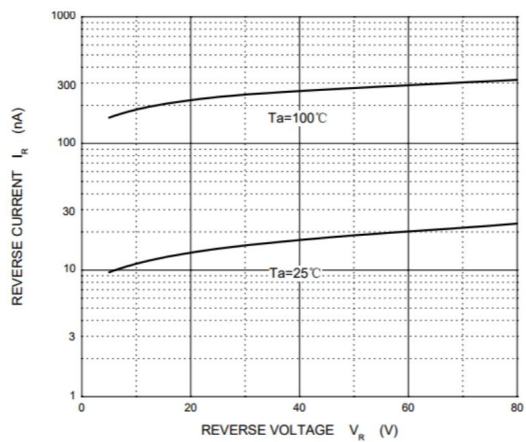
ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Type	Max	Unit
Forward Voltage	V_F	$I_F=1\text{mA}$			0.715	V
		$I_F=10\text{mA}$			0.855	V
		$I_F=50\text{mA}$			1.00	V
		$I_F=150\text{mA}$			1.25	V
Reverse breakdown voltage	V_R	$I_R=100\mu\text{A}$			4.0	nS
Reverse voltage leakage current	I_R	$V_R=75\text{V}$			2.5	μA
		$V_R=75\text{V}$ $T_a=150^{\circ}\text{C}$			50	μA
Typical Junction Capacitance	C_j	$V_R=0\text{V}$, $f=1.0\text{MHz}$			2	pF
Reverse recovery time	T_{rr}	$I_F=10\text{mA}$, $V_R=0\text{V}$, $R_L=100\Omega$			4	nS

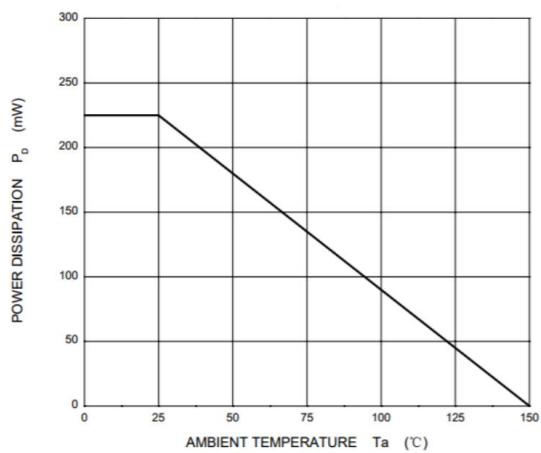
Typical Electrical



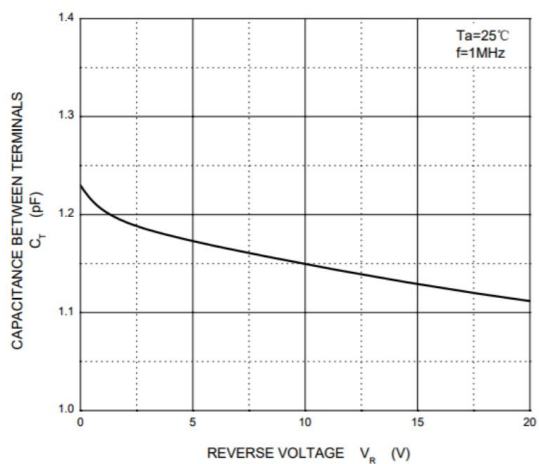
Forward Characteristics



Reverse Characteristics



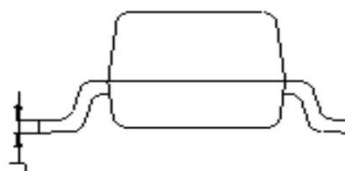
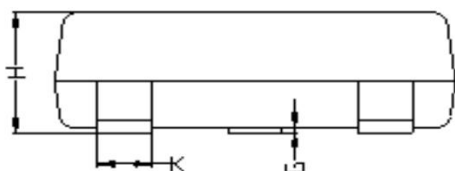
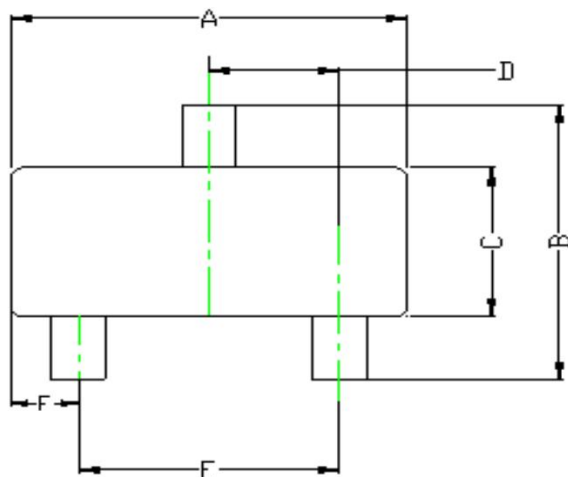
Power Derating Curve



CT vs VR

SOT-23 Package Information

Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
BAV70	SOT23	Tape & Reel 3000pcs/7"Reel	8mm	4mm	Conductive	



Symbol	Dimensions In Millimeters		
	Min	Typ	Max
A	2.800	-	3.040
B	2.100	-	2.640
C	1.200	-	1-400
D	0.890	-	1.030
E	1.780	-	2.050
F	0.450	-	0.600
G	0.013	-	0.100
H	0.900	-	1.110
J	0.090	-	0.180
K	0.370	-	0.510

1.Unit mm