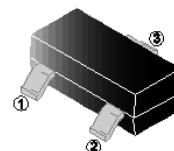


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Low Current Leakage
- Small Outline Surface Mount Package

## SOT-23



## APPLICATIONS

- High-Speed Switching in Thick and Thin-Film Circuits

## MARKING

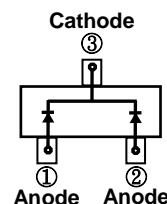
A4

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

## ORDER INFORMATION

Part Number	Type
BAV70-C	Lead (Pb)-free and Halogen-free



## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise specified)

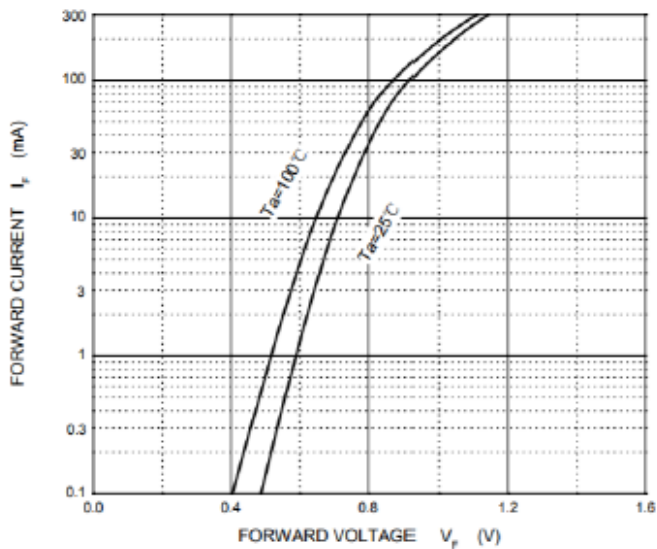
Parameter	Symbol	Ratings	Unit
Reverse Voltage	V <sub>R</sub>	75	V
Average Rectified Output Current	I <sub>O</sub>	150	mA
Non-Repetitive Peak Forward Surge Current @t=1s	I <sub>FSM</sub>	1	A
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction-Ambient	R <sub>θJA</sub>	357	°C/W
Junction, Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

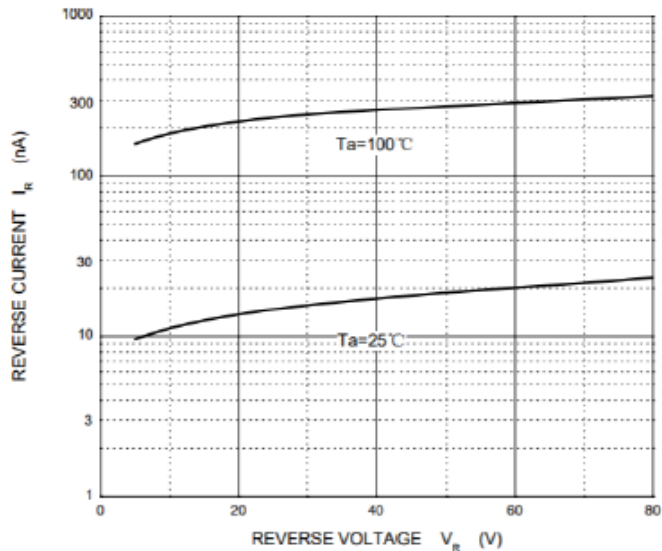
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V <sub>R</sub>	75	-	-	V	I <sub>R</sub> =100μA
Leakage Current	I <sub>R</sub>	-	-	2.5	μA	V <sub>R</sub> =75V
		-	-	50		V <sub>R</sub> =75V, T <sub>A</sub> =150°C
Forward Voltage	V <sub>F</sub>	-	-	715	mV	I <sub>F</sub> =1mA
		-	-	855		I <sub>F</sub> =10mA
		-	-	1000		I <sub>F</sub> =50mA
		-	-	1250		I <sub>F</sub> =150mA
Junction Capacitance	C <sub>J</sub>	-	2	-	pF	V <sub>R</sub> =0, f=1MHz
Reverse Recovery Time	T <sub>rr</sub>	-	4	-	nS	I <sub>F</sub> =10mA, V <sub>R</sub> =0V, R <sub>L</sub> =100Ω

**RATINGS AND CHARACTERISTIC CURVES**

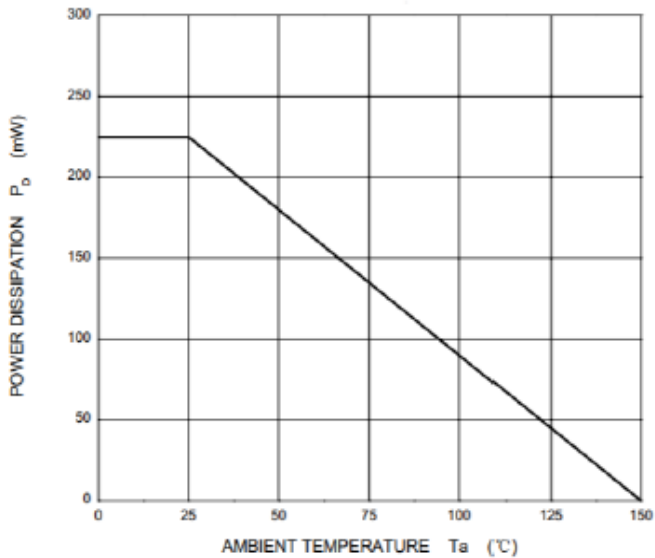
Forward Characteristics



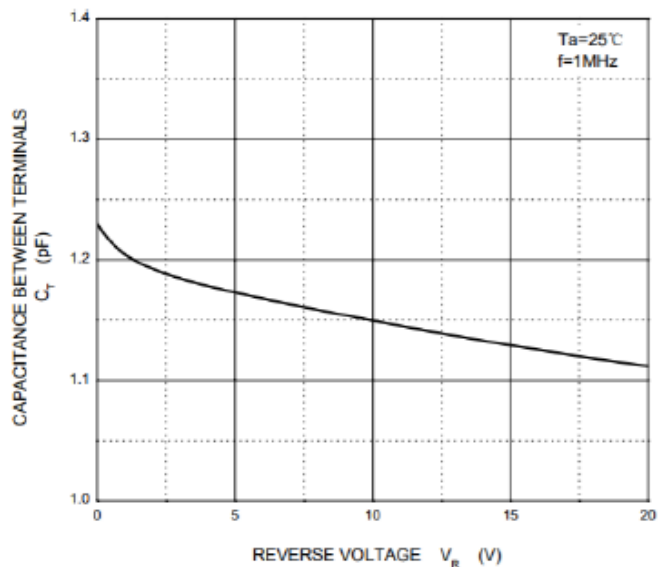
Reverse Characteristics



Power Derating Curve

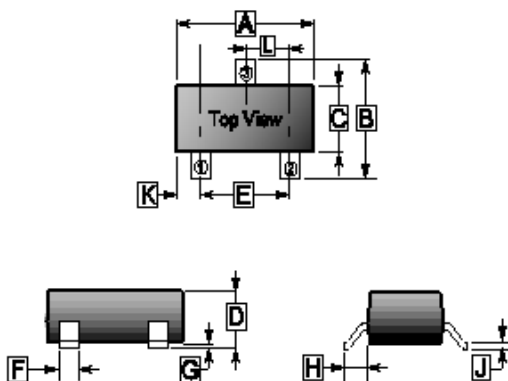


CT vs VR



**PACKAGE OUTLINE DIMENSIONS**

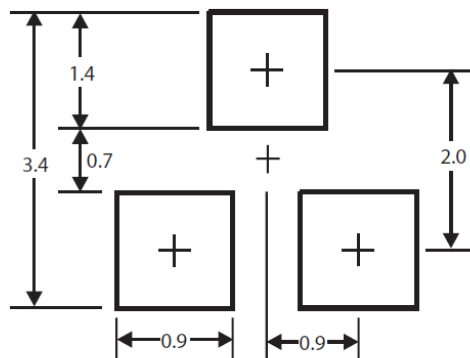
**SOT-23**



REF.	Millimeter	
	Min.	Max.
A	2.65	3.10
B	2.10	3.00
C	1.10	1.80
D	0.89	1.40
E	1.70	2.30
F	0.28	0.55
G	-	0.18
H	0.55 REF.	
J	0.05	0.26
K	0.60 REF.	
L	0.95 TYP.	

**MOUNTING PAD LAYOUT**

**SOT-23**



\*Dimensions in millimeters