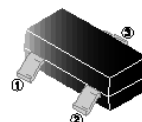


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

SOT-323



MARKING

A4

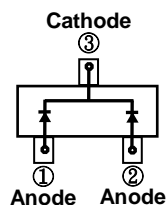
KJA

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-323	3K	7 inch

ORDER INFORMATION

Part Number	Type
BAV70W-C	Lead (Pb)-free and Halogen-free



ABSOLUTE MAXIMUM RATINGS (T_A=25°C unless otherwise specified)

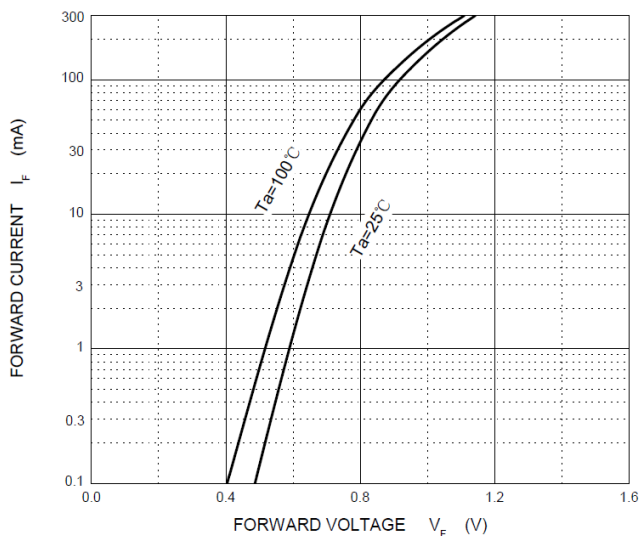
Parameter	Symbol	Ratings	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{R(RM)}	75	
Working Peak Reverse Voltage	V _{R(WM)}	75	
DC Blocking Voltage	V _R	75	
RMS Reverse Voltage	V _{R(RMS)}	53	
Forward Continuous Current	I _F	300	mA
Average Rectified Output Current	I _O	150	
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	200	mW
Thermal Resistance Junction-Ambient	R _{θJA}	625	°C/W
Junction, Storage Temperature	T _J , T _{STG}	-55~150	°C

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

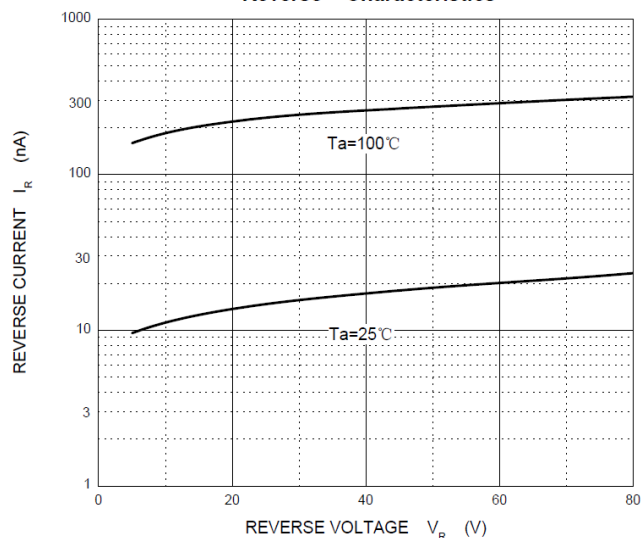
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	75	-	-	V	$I_R=100\mu\text{A}$
Reverse Voltage Leakage Current	I_R	-	-	2.5	μA	$V_R=75\text{V}$
		-	-	25	nA	$V_R=20\text{V}$
Forward Voltage	V_F	-	-	715	mV	$I_F=1\text{mA}$
		-	-	855		$I_F=10\text{mA}$
		-	-	1000		$I_F=50\text{mA}$
		-	-	1250		$I_F=150\text{mA}$
Capacitance Between Terminals	C_T	-	2	-	pF	$V_R=0, f=1\text{MHz}$
Reverse Recovery Time	T_{RR}	-	4	-	nS	$I_F=I_R=10\text{mA}, I_{RR}=0.1 \times I_R, R_L=100\Omega$

RATINGS AND CHARACTERISTIC CURVES

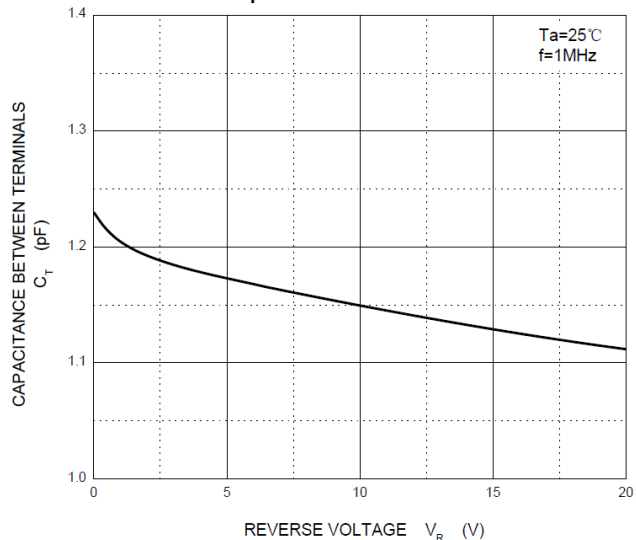
Forward Characteristics



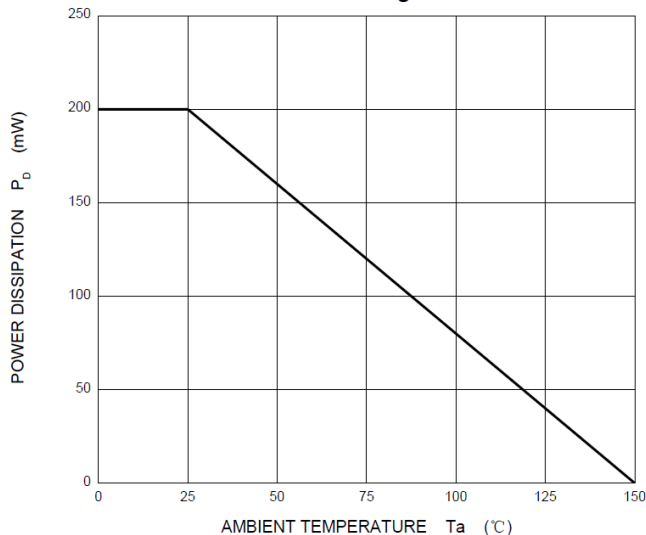
Reverse Characteristics



Capacitance Characteristics

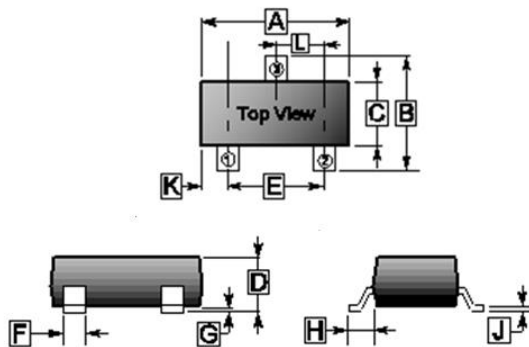


Power Derating Curve



PACKAGE OUTLINE DIMENSIONS

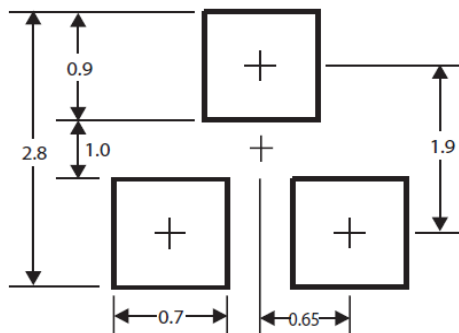
SOT-323



REF.	Millimeter	
	Min.	Max.
A	1.80	2.20
B	1.80	2.55
C	1.10	1.40
D	0.80	1.15
E	1.20	2.00
F	0.15	0.50
G	0.10 REF.	
H	0.525 REF.	
J	0.05	0.05
K	0.35 REF.	
L	0.65 TYP.	

MOUNTING PAD LAYOUT

SOT-323



*Dimensions in millimeters