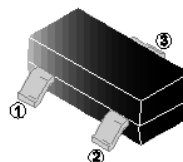


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

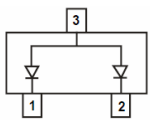
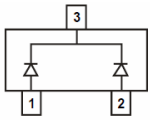
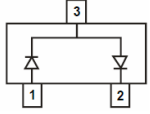
SOT-23



## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-23	3K	7 inch

## ORDER INFORMATION

Part Number	Equivalent Circuit	Marking
BAV23A-C		KT7
BAV23C-C		KT6
BAV23S-C		KL31

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

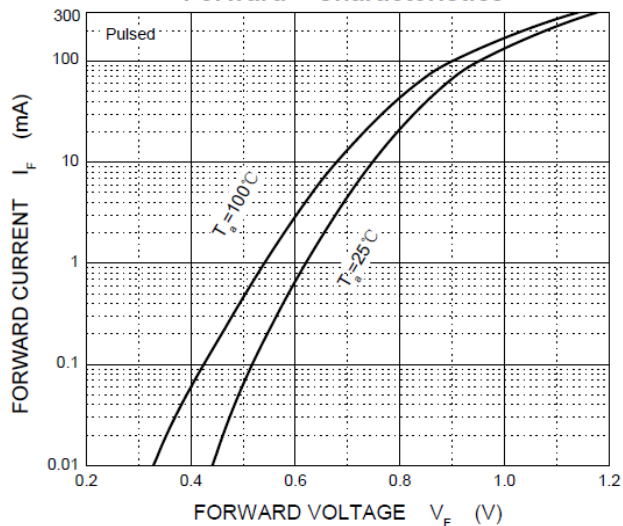
Parameter	Symbol	Ratings	Unit
Peak Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	250	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	250	
RMS Reverse Voltage	V <sub>R</sub>	175	
Average Rectified Output Current	I <sub>O</sub>	225	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	1.7	A
Power Dissipation	P <sub>D</sub>	350	mW
Thermal Resistance Junction-Ambient	R <sub>θJA</sub>	357	°C/W
Operating Junction & Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55~150	°C

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

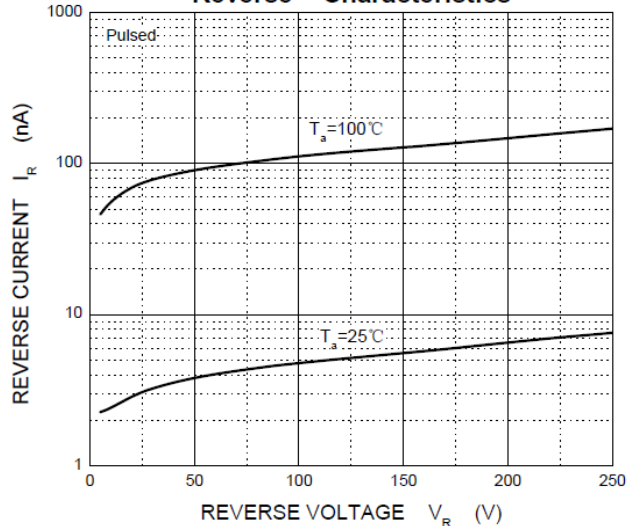
Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V <sub>(BR)</sub>	250	-	-	V	I <sub>R</sub> =100μA
Reverse Voltage Leakage Current	I <sub>R</sub>	-	-	0.1	μA	V <sub>R</sub> =250V
Forward Voltage	V <sub>F</sub>	-	-	1	V	I <sub>F</sub> =100mA
		-	-	1.25		I <sub>F</sub> =200mA
Total Capacitance	C <sub>T</sub>	-	5	-	pF	V <sub>R</sub> =0, f=1MHz
Reverse Recovery Time	t <sub>rr</sub>	-	50	-	nS	I <sub>F</sub> =I <sub>R</sub> =30mA, I <sub>rr</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω

**RATINGS AND CHARACTERISTIC CURVES**

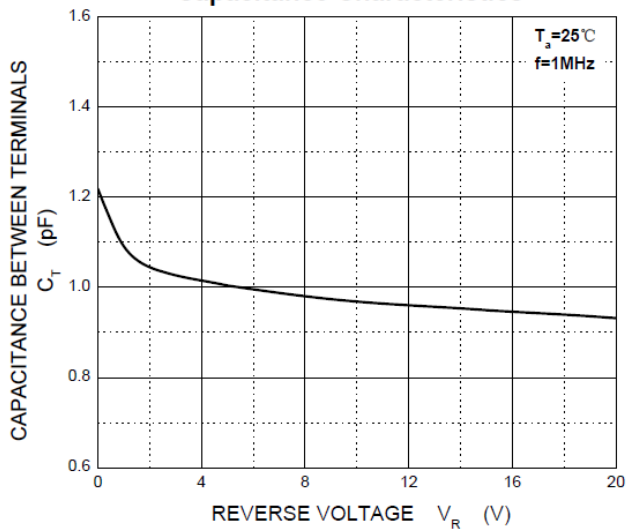
**Forward Characteristics**



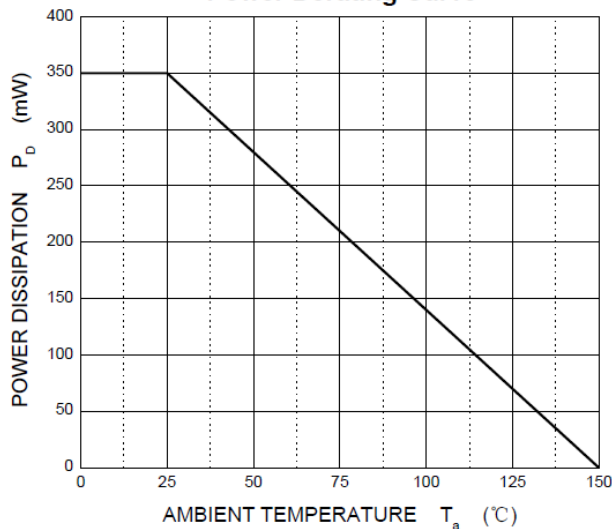
**Reverse Characteristics**



**Capacitance Characteristics**

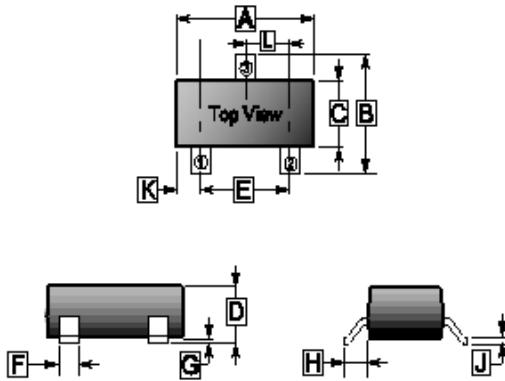


**Power Derating Curve**



**PACKAGE OUTLINE DIMENSIONS**

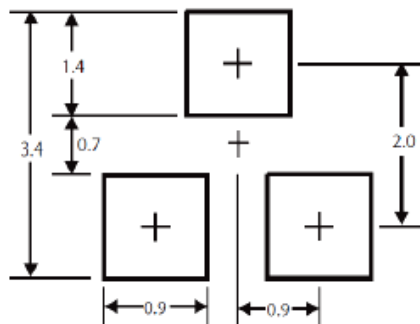
**SOT-23**



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