

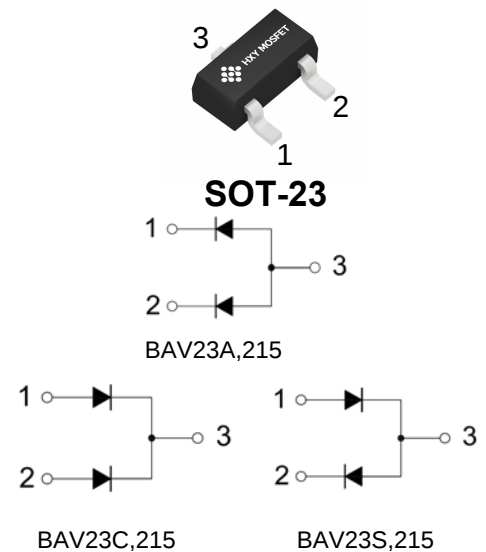


Features

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

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BAV23A,215	SOT-23	KT7	3000
BAV23C,215	SOT-23	KT6	3000
BAV23S,215	SOT-23	KL31	3000



Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RRM}	Peak Repetitive Reverse Voltage	250	V
V _{RWM}	Working Peak Reverse Voltage		
V _{R(RMS)}	RMS Reverse Voltage	175	V
I _O	Average Rectified Output Current	225	mA
I _{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	1.7	A
P _D	Power Dissipation	350	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	357	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

Electrical Characteristics(Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	V _(BR)	I _R =100μA	250			V
Reverse current	I _R	V _R =250V			0.1	μA
Forward voltage	V _F	I _F =100mA			1	V
		I _F =200mA			1.25	
Total capacitance	C _{tot}	V _R =0V, f=1MHz			5	pF
Reverse recovery time	t _{rr}	I _F = I _R =30mA, I _{rr} =0.1×I _R , R _L =100Ω			50	ns

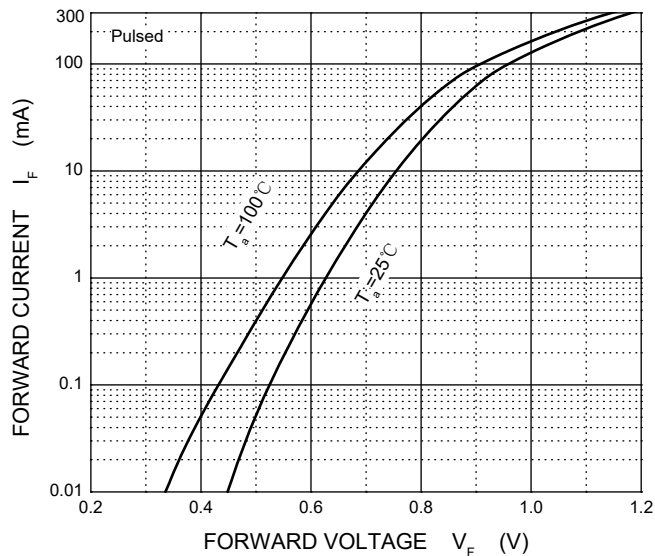
Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

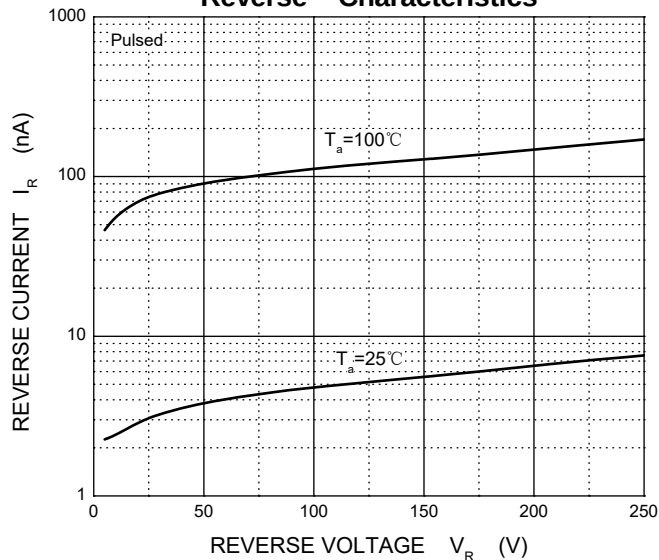


Typical Characteristics

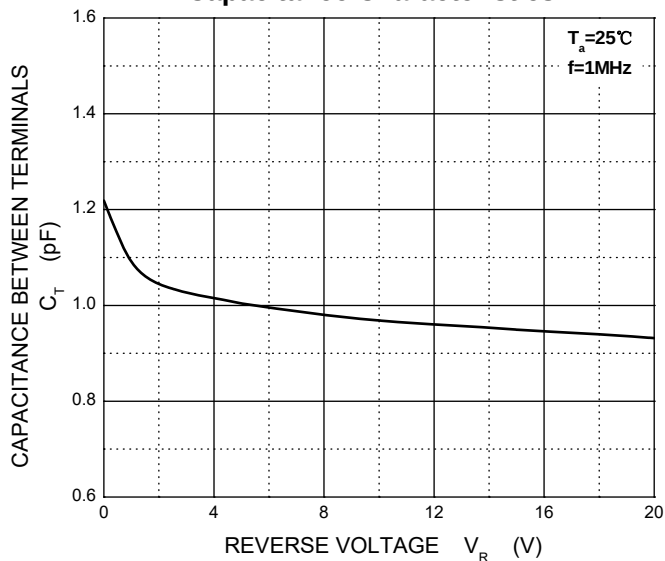
Forward Characteristics



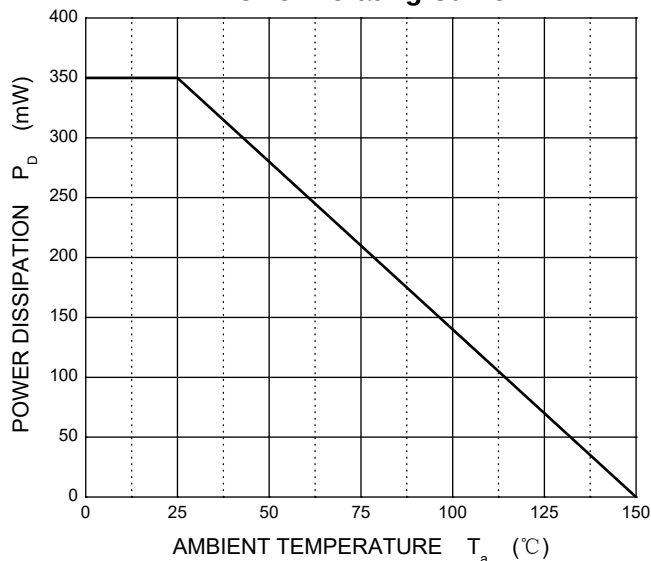
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve





SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



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