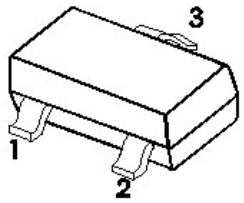
BAV23/A/C/S

SOT-23 Plastic-Encapsulate Switching Diode

Features

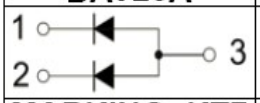
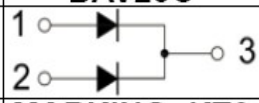
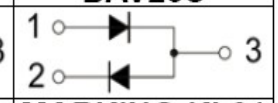
- Fast Switching Device (TRR <50nS)
- Power Dissipation of 350mW
- High Stability and High Reliability
- Low reverse leakage

SOT-23



Mechanical Data

- SOT-23 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

BAV23A	BAV23C	BAV23S
		
MARKING: KT7	MARKING: KT6	MARKING:KL31
		

Maximum Ratings & Thermal Characteristics

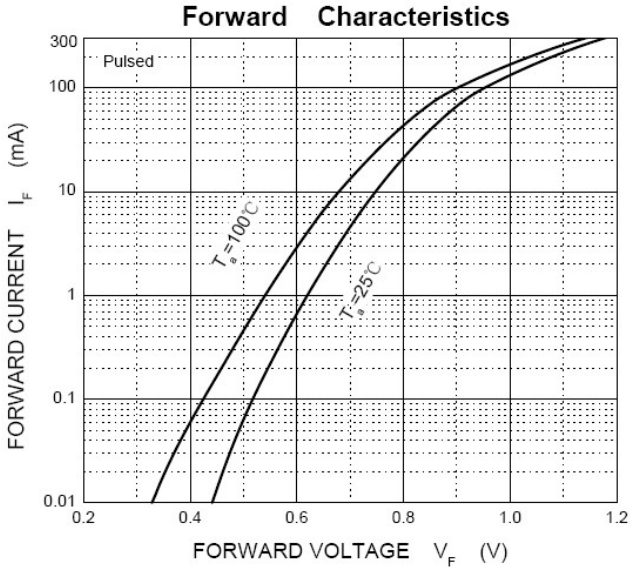
(Ratings at 25℃ ambient temperature unless otherwise specified.)

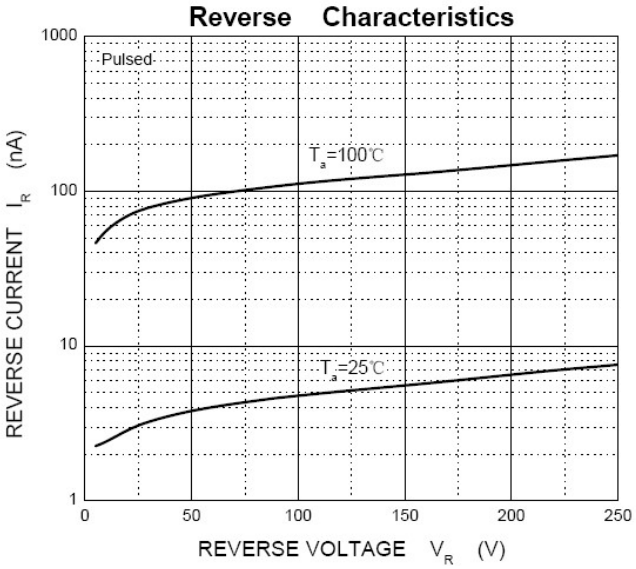
Symbol	Parameter	Value	Unit
V_{RRM}	Peak Repetitive Reverse Voltage	250	V
V_{RWM}	Working Peak Reverse Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	175	V
I_O	Average Rectified Output Current	225	mA
I_{FRM}	Repetitive Peak Forward Surge Current	625	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	1.7	A
P_D	Power Dissipation	350	mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	357	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

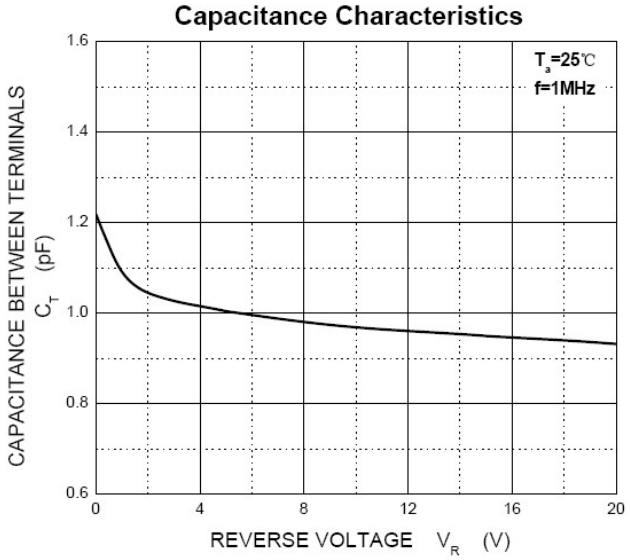
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

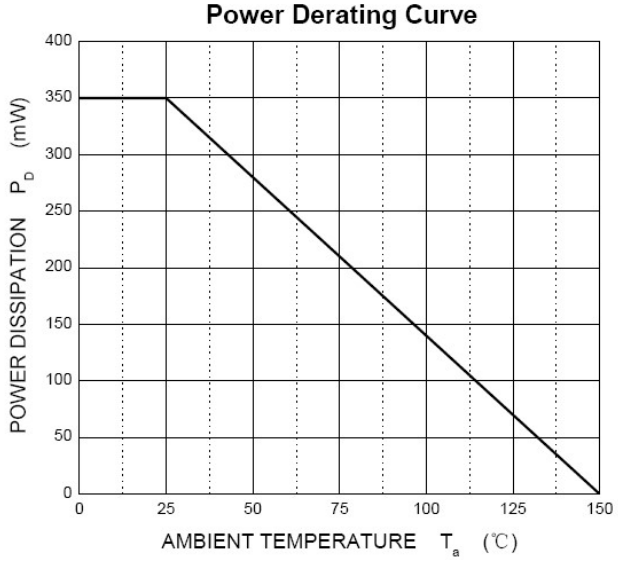
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	250			V
Reverse current	I_R	V_R=250V			0.1	μA
Forward voltage	V_F	I_F=100mA			1	V
		I_F=200mA			1.25	
Total capacitance	C_{tot}	V_R=0V,f=1MHz			5	pF
Reverse recovery time	t_{rr}	I_F= I_R=30mA, I_{rr}=0.1×I_R, R_L=100Ω			50	ns

Typical Characteristics



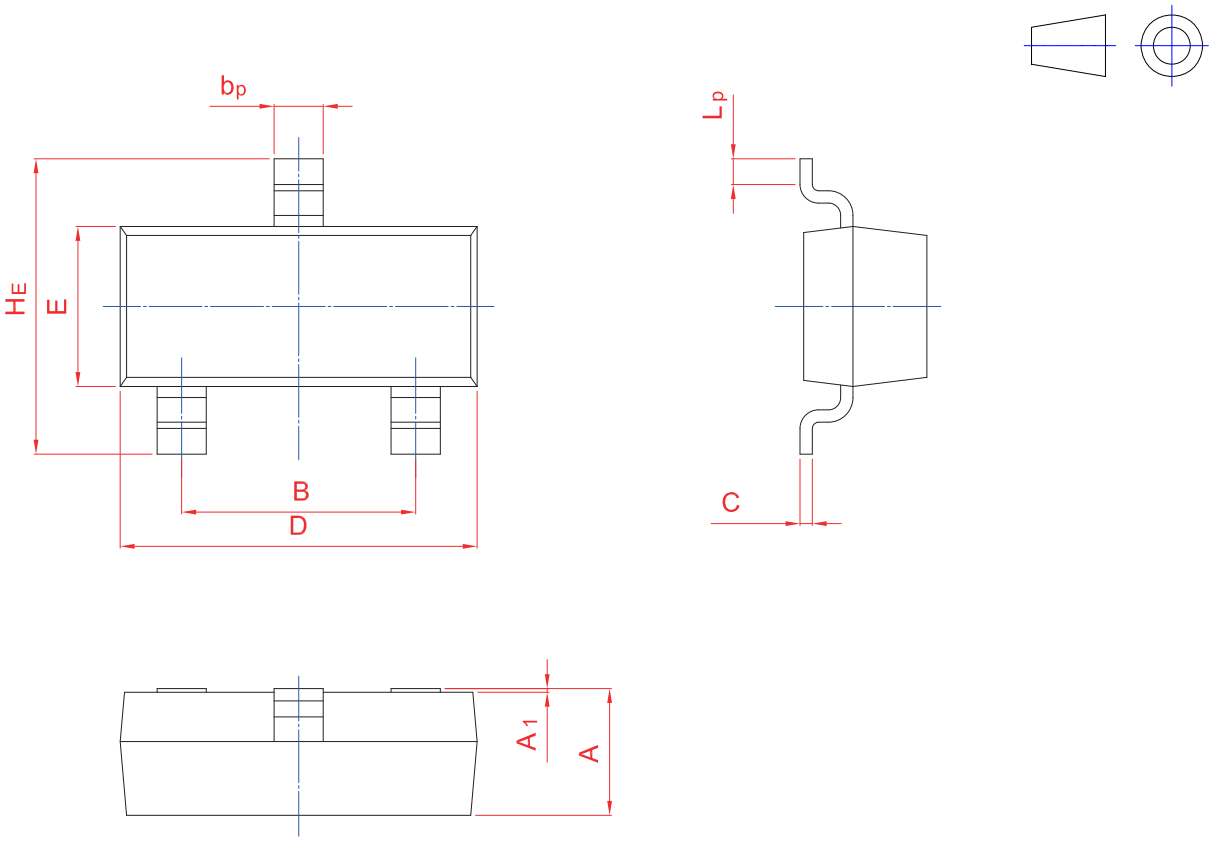






Package Outline

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.89	2.04 1.78	0.51 0.30	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20