

250mW SOD-323 Fast Switching Diode

Features

- 50nS; Fast Switching Device (TRR <50 nS)
- 250mW; Power Dissipation of 250mW
- High Stability and High Reliability
- Low reverse leakage

Mechanical Data

- SOD-323 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any



RoHS
COMPLIANT



Marking : SOD-323

BAV19WS: A8

BAV20WS: T2

BAV21WS: T3



Maximum Ratings & Thermal Characteristics (T_A=25°C unless otherwise noted)

Parameters	Symbol	Value			Unit
		BAV19WS	BAV20WS	BAV21WS	
Reverse Voltage	V _R	120	200	250	V
Peak Reverse Voltage	V _{RM}	100	150	250	V
Power Dissipation	P _D	250			mW
Operating junction temperature	T _J	-55 to +150			°C
Storage temperature range	T _S	-65 to +150			°C
Working Inverse Voltage	W _{IV}	75			V
Thermal Resistance from Junction to Ambient	R _{θJA}	500			°C/W
Average Rectified Current	I _O	200			mA
Non-repetitive Peak Forward Current	I _{FM}	400			mA
Peak Forward Surge Current @tp=1ms; T _A =25 °C	I _{FSM}	1.7			A

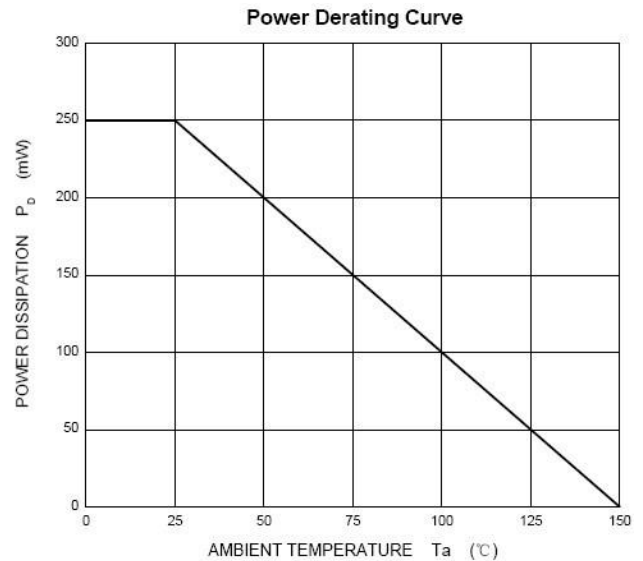
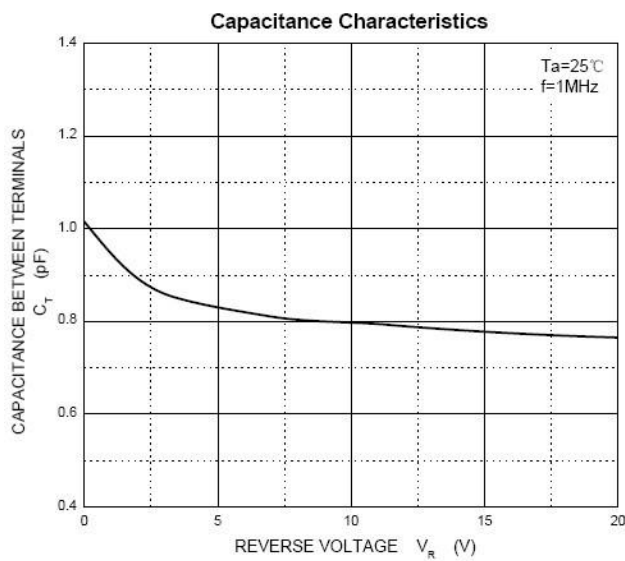
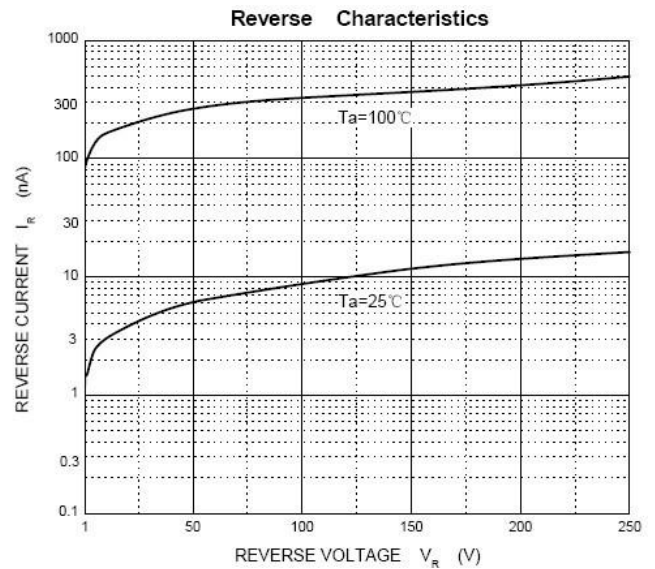
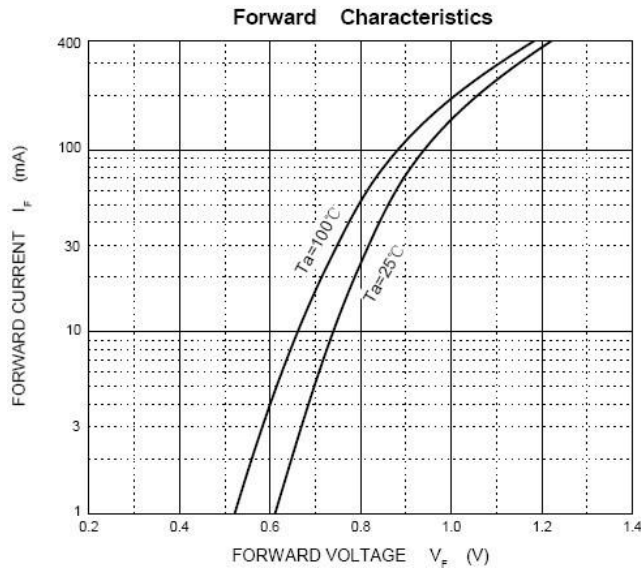
Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbols	Test Condition	Limits		Unit
			Min	Max	
Reverse Voltage	V _(BR)	IB=100uA BAV19WS BAV20WS BAV21WS	120 200 250		V
Reverse Leakage Current	I _R	VR=100V BAV19WS VR=150V BAV20WS VR=200V BAV21WS		0.1	uA
Forward Voltage	V _F	IF=100mA		1.00	V
		IF=200mA		1.25	
Reverse Recovery Time	T _{RR}	IF = IR = 30mA, Irr=3mA RL=100Ω		50	nS
Capacitance	C _j	VR=0V, f=1MHZ		5	pF

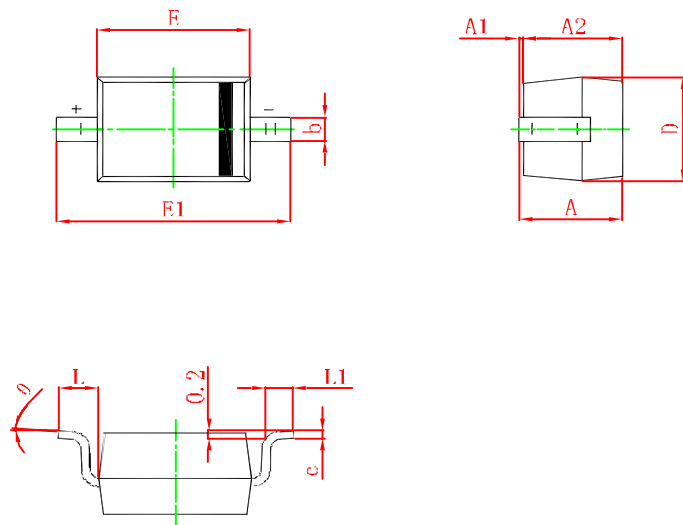
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions

millimeters



Symbol	Min	Max
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2016.04.10	First issue
Rev.B	2025.07.16	Add a device diagram

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