250mWSOD-323Fast SwitchingDiode

Features

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

RoHS
COMPLIANT

Marking : **SOD-323**
BAV19WS: A8
BAV20WS: T2
BAV21WS: T3

Mechanical Data

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

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	150			℃
Storage temperature range	T_S	-65-+150			℃
Working Inverse Voltage	W_{IV}	75			V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500			℃/W
Average Rectified Current	I_O	200			mA
Non-repetitive Peak Forward Current	I_{FM}	400			mA
Peak Forward Surge Current @tp=1ms; TA=25 ℃	I_{FSM}	1.7			A

Valid provided that electrodes are kept at ambient temperature.

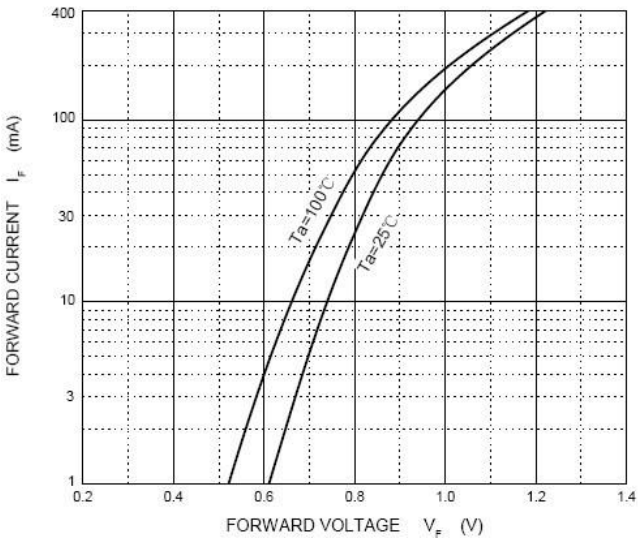
Electrical Characteristics (T_A =25°C unless otherwise noted)

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

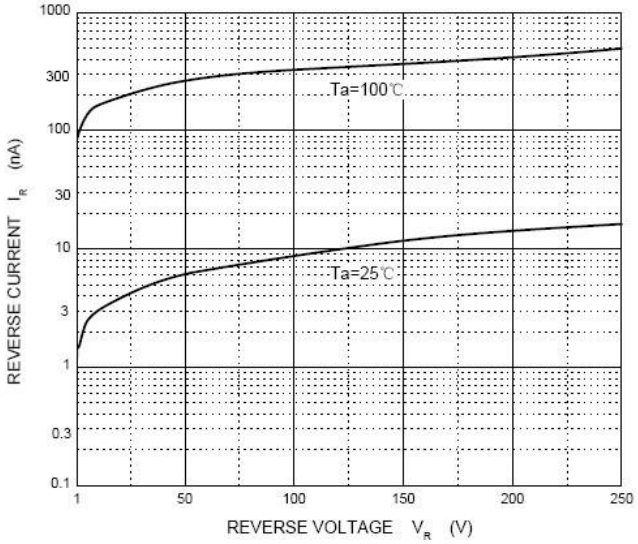
Ratings and Characteristics Curves

(T_A = 25℃ unless otherwise noted)

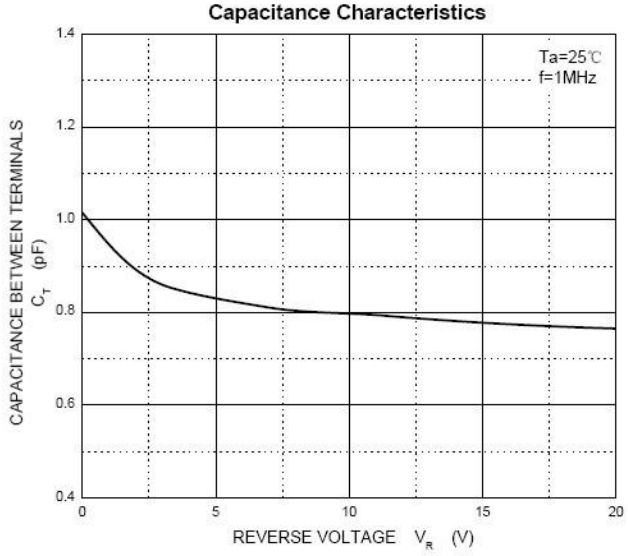
Forward Characteristics



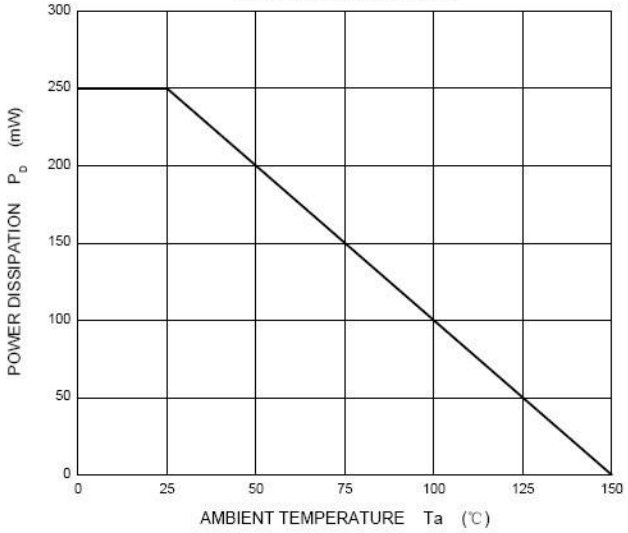
Reverse Characteristics



Capacitance Characteristics

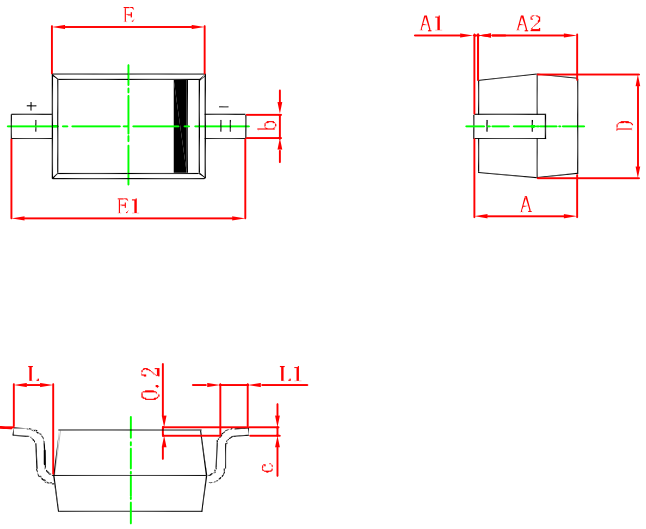


Power Derating Curve



Package Outline Dimensions

in inches (millimeters)



Symbol	Min.(mm)	Max.(mm)
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

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