HAICHUANG SEMI

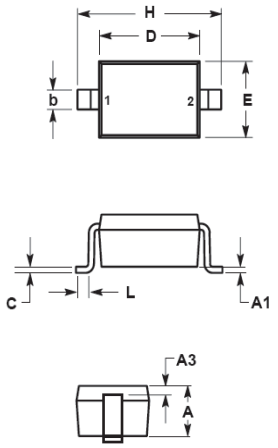
BAV19WS-BAV21WS

SURFACE MOUNT FAST SWITCHING DIODE

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

DEVICE	MARKING
BAV19WS	A8
BAV20WS	T2
BAV21WS	T3



SOD-323		
Dim.	Min.	Max.
A	0.90	1.20
A1	0.00	0.10
A3	0.15 REF	
B	0.25	0.40
C	0.10	0.15
D	1.60	1.80
E	1.15	1.35
L	0.20	0.50
H	2.30	2.80
Dimensions in millimeter		

Maximum Ratings @ T_A = 25°C unless otherwise specified

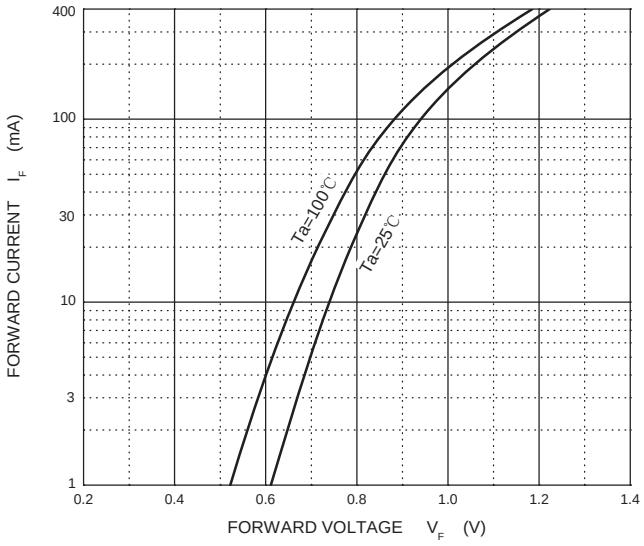
Symbol	Parameter	Value			Unit
		BAV19WS	BAV20WS	BAV21WS	
V_{RM}	Non-Repetitive Peak Reverse Voltage	120	200	250	V
V_{RRM}	Peak Repetitive Reverse Voltage	100	150	200	V
V_{RWM}	Working Peak Reverse Voltage				
$V_{R(RMS)}$	RMS Reverse Voltage	71	106	141	V
I_O	Average Rectified Output Current	200			mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @ t=8.3ms	2.0			A
P_D	Power Dissipation	250			mW
$R_{\Theta JA}$	Thermal Resistance from Junction to Ambient	500			℃/W
T_j	Junction Temperature	150			℃
T_{stg}	Storage Temperature	-55~+150			℃

Electrical Characteristics @ T_A = 25°C unless otherwise specified

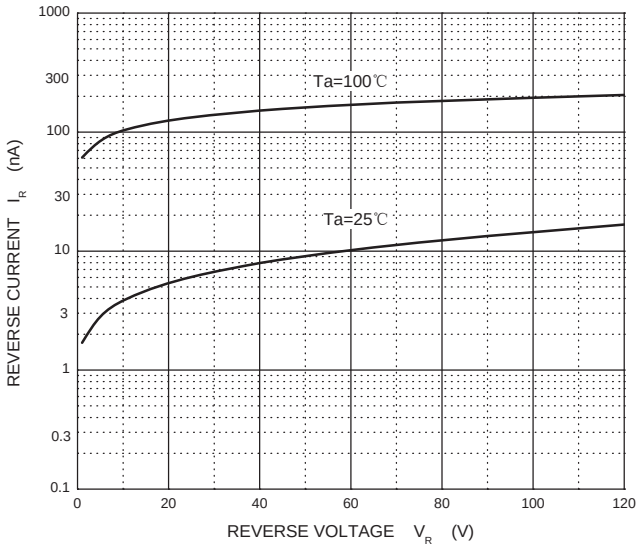
Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Reverse current	I_R	V_R=100V	BAV19WS			0.1	uA
		V_R=150V	BAV20WS			0.1	
		V_R=200V	BAV21WS			0.1	
Forward voltage	V_F	I_F=100mA				1	V
		I_F=200mA				1.25	
Total capacitance	C_{tot}	V_R=0V,f=1MHz				5	pF
Reverse recovery time	t_{rr}	I_F= I_R =30mA, I_{rr}=0.1*I_R , R_L=100Ω				50	nS

TYPICAL TRANSIENT CHARACTERISTICS

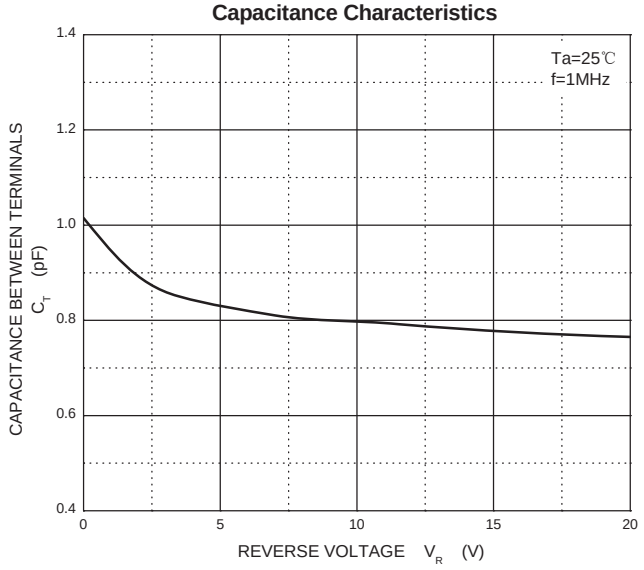
Forward Characteristics



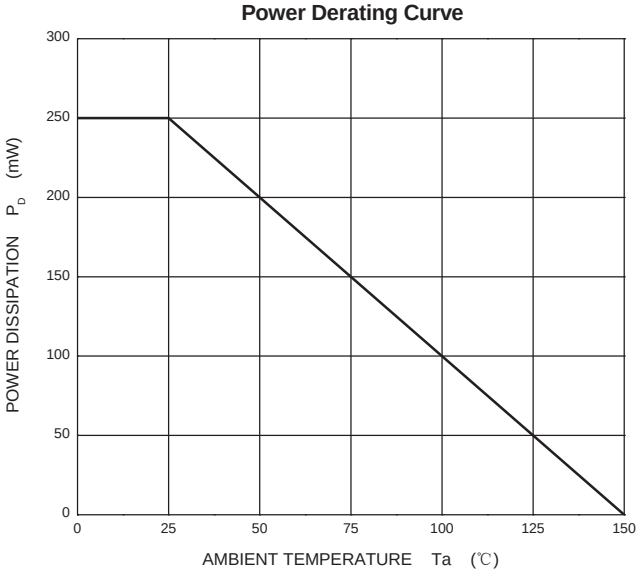
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve



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