

BAV19WS, BAV20WS, BAV21WS

Silicon Epitaxial Planar Diodes

High Voltage Switching Diode

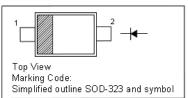
Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion

BAV19WS		BAV20WS	BAV21WS	
MARKING	A8	T2	T3	

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (Ta = 25 oC)

Parameter		Symbol	Value	Unit
Repetitive Peak Reverse Voltage	BAV19WS BAV20WS BAV21WS	$V_{\sf RRM}$	120 200 250	V
Reverse Voltage	BAV19WS BAV20WS BAV21WS	V_{R}	100 150 200	٧
Average Rectified Forward Current		I _{F(AV)}	200	mA
Forward Continuous Current		I _{FM}	400	mA
Repetitive Peak Forward Current		I _{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current	at t = 1 µs at t = 1 s	I _{FSM}	2.5 0.5	Α
Power Dissipation		P _{tot}	200	mW
Operating and Storage Temperature Range		T_{j},T_{stg}	- 65 to + 150	°C

Characteristics at $T_a = 25 \text{ oC}$

Parameter		Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage					
at I _R = 100 μA	BAV19WS BAV20WS	$V_{(BR)R}$	120 200	-	V
	BAV20VS BAV21WS	(=)	250	-	
Reverse Current					
at V _R = 100 V	BAV19WS	-	-	100	nA l
at V _R = 150 V	BAV20WS	I _R	-	100	''^
at V _R = 200 V	BAV21WS		-	100	
Forward Voltage					
at I _F = 100 mA		V_{F}	-	1	V
at I _F = 200 mA			-	1.25	
Total Capacitance				5	55
at $V_R = 0$, $f = 1$ MHz		C _T	-	J	pF
Reverse Recovery Time at $I_F = I_R = 30$ mA, $I_{RR} = 0.1$ X I_R , $R_L = 100$ Ω		t _{rr}	-	50	ns

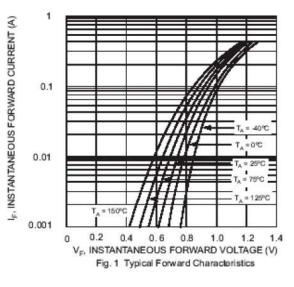
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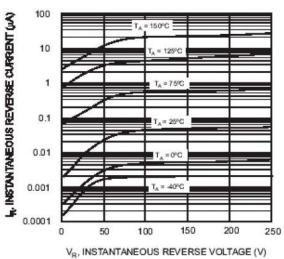
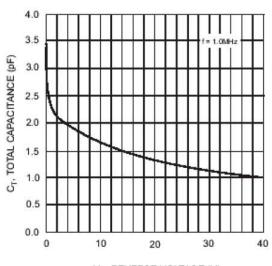
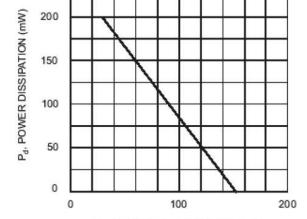


Fig. 2 Typical Reverse Characteristics





250

V_R, REVERSE VOLTAGE (V)
Fig. 3 Typical Capacitance vs. Reverse Voltage

T_A, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve, Total Package

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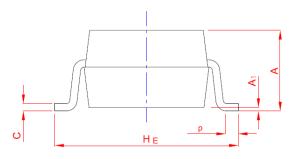


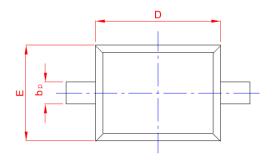
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PACKAGE OUTLINE

Plastic surface mounted package;

2 leads





UNIT	Α	bp	С	D	E	HE	A 1	Lp
mm	1.20	0.40	0.15	1.80	1.35	2.80	0.10	0.50
	0.90	0.25	0.10	1.60	1.15	2.30	0.01	0.20

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