

SOD-323 Plastic-Encapsulate Diodes

BAS19WS/BAS20WS/BAS21WS FAST SWITCHING DIODE

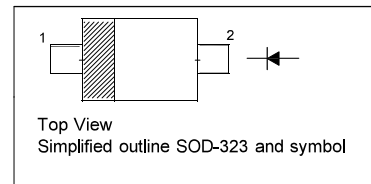
FEATURES

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

MARKING: BAS19WS: A8
BAS20WS: T2
BAS21WS: T3

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Parameter	Symbol	BAV19WS	BAV20WS	BAV21WS	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	120	200	250	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}				
Working Peak Reverse Voltage	V_{RWM}	100	150	200	V
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward Continuous Current	I_{FM}	400			mA
Average Rectified Output Current	I_O	200			mA
Peak Forward Surge Current @t=1.0ms @ t=1.0s	I_{FSM}	2.5 0.5			A
Repetitive Peak Forward Current	I_{FRM}	625			mA
Power Dissipation	P_d	200			mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			°C/W
Storage Temperature	T_{STG}	-55~+150			°C

Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_{F1}			1.0	V	$I_F=0.1A$
	V_{F2}			1.25		$I_F=0.2A$
Reverse current	BAS19WS BAS20WS BAS21WS I_R			0.1	μA	$V_R=100V$
				0.1		$V_R=150V$
				0.1		$V_R=200V$
Capacitance between terminals	C_T			5	pF	$V_R=0V, f=1MHz$
Reverse recovery time	t_{rr}			50	ns	$I_F=I_R=30mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

Typical Characteristics

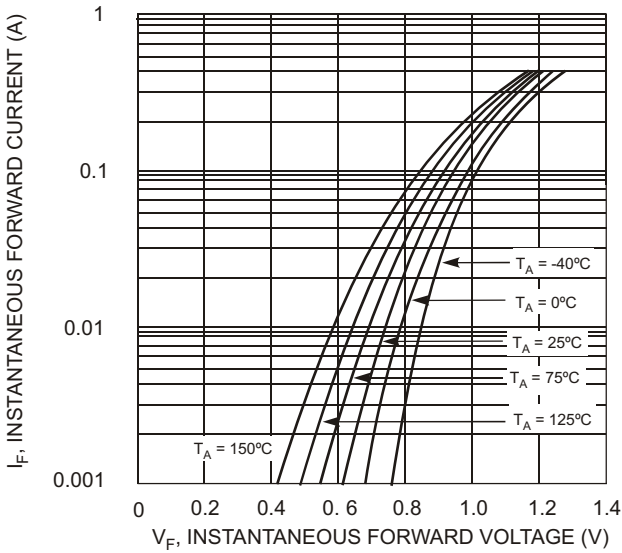


Fig. 1 Typical Forward Characteristics

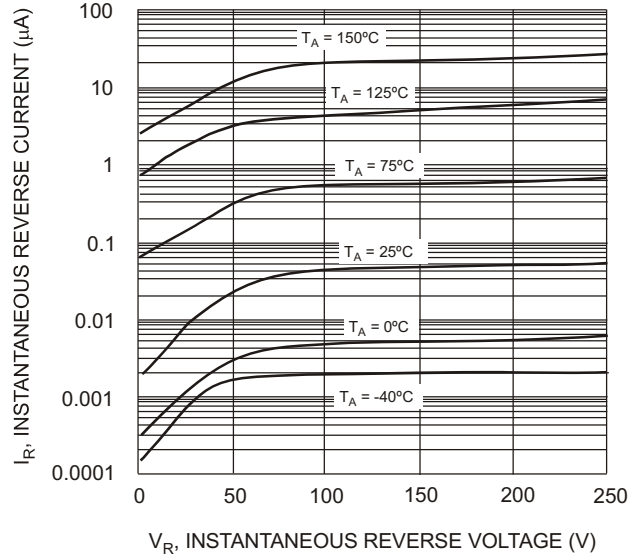


Fig. 2 Typical Reverse Characteristics

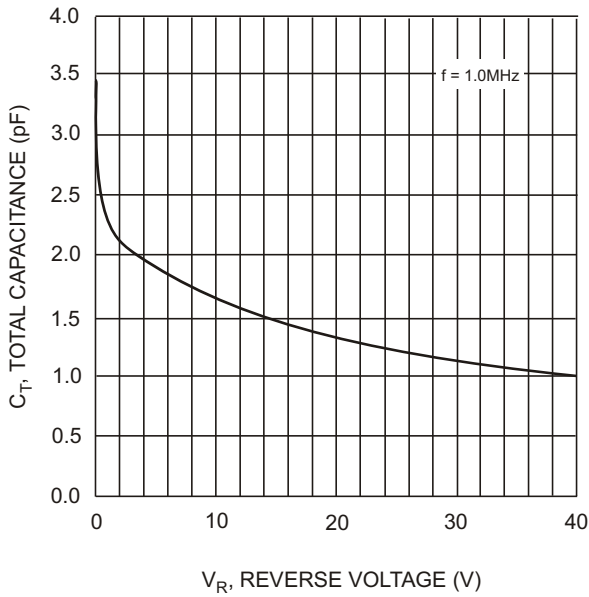


Fig. 3 Typical Capacitance vs. Reverse Voltage

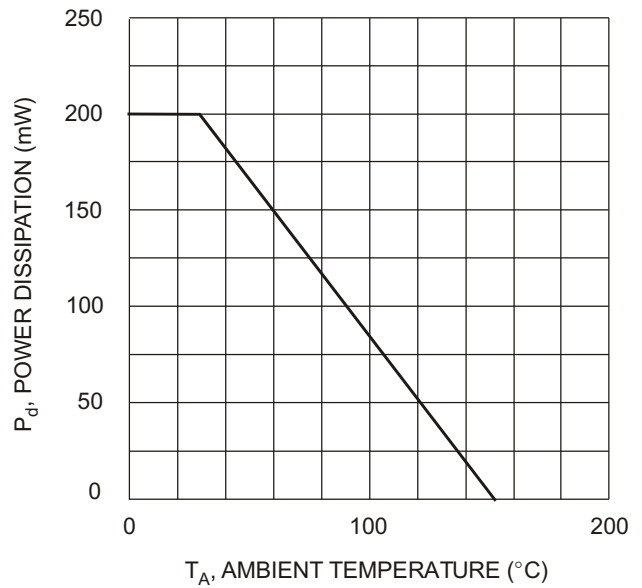


Fig. 4 Power Derating Curve, Total Package

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

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