

SOD-323 Plastic-Encapsulate Diodes

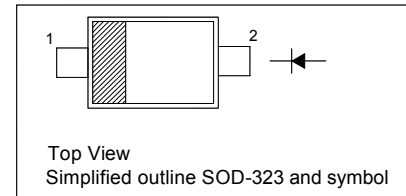
BAV16WS/1N4148WS FAST SWITCHING DIODES

FEATURES

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

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100	V
Peak Repetitive Peak reverse voltage	V _{RPM}	75	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Peak forward surge current @=1.0μs	I _{FSM}	2.0	A
@=1.0s		1.0	
Power Dissipation	P _d	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Junction temperature	T _j	125	°C
Storage temperature	T _{STG}	-65~+150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V _{F1}			0.715	V	I _F =1mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =50mA
	V _{F4}			1.25	V	I _F =150mA
Reverse current	I _{R1}			1	μA	V _R =75V
	I _{R2}			25	nA	V _R =20V
Capacitance between terminals	C _T			2	pF	V _R =0V, f=1MHz
Reverse Recovery Time	t _{rr}			4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

Typical Characteristics

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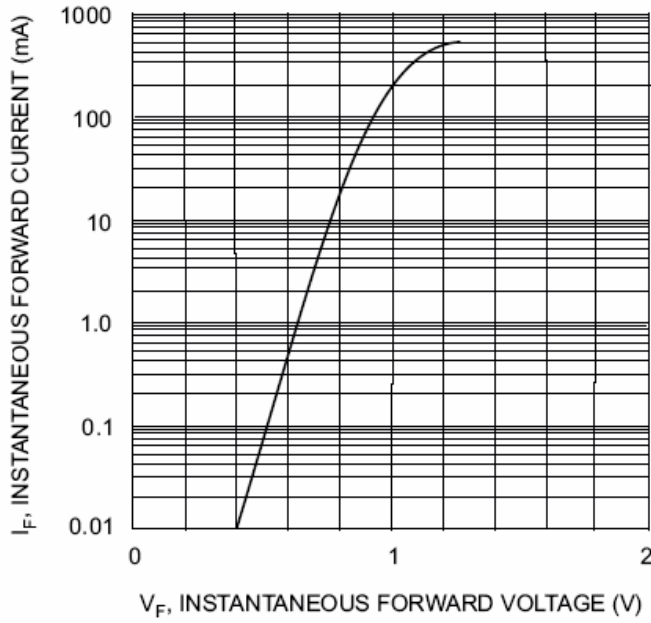


Fig. 1 Forward Characteristics

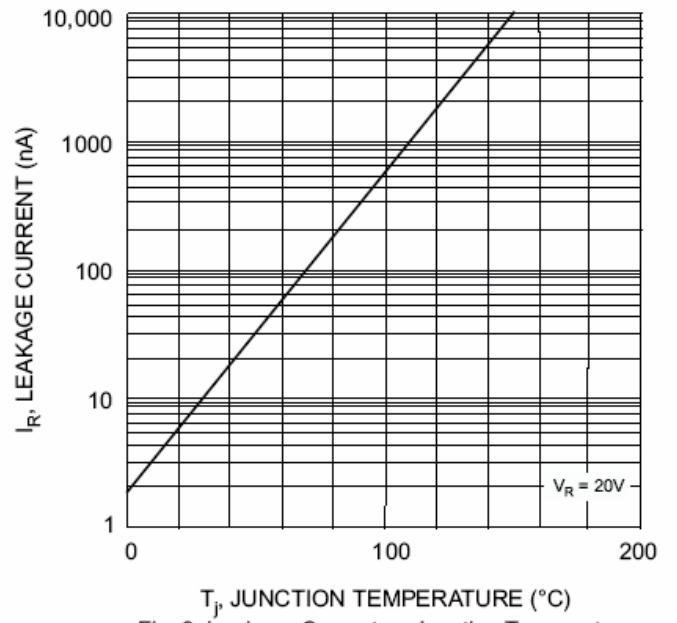


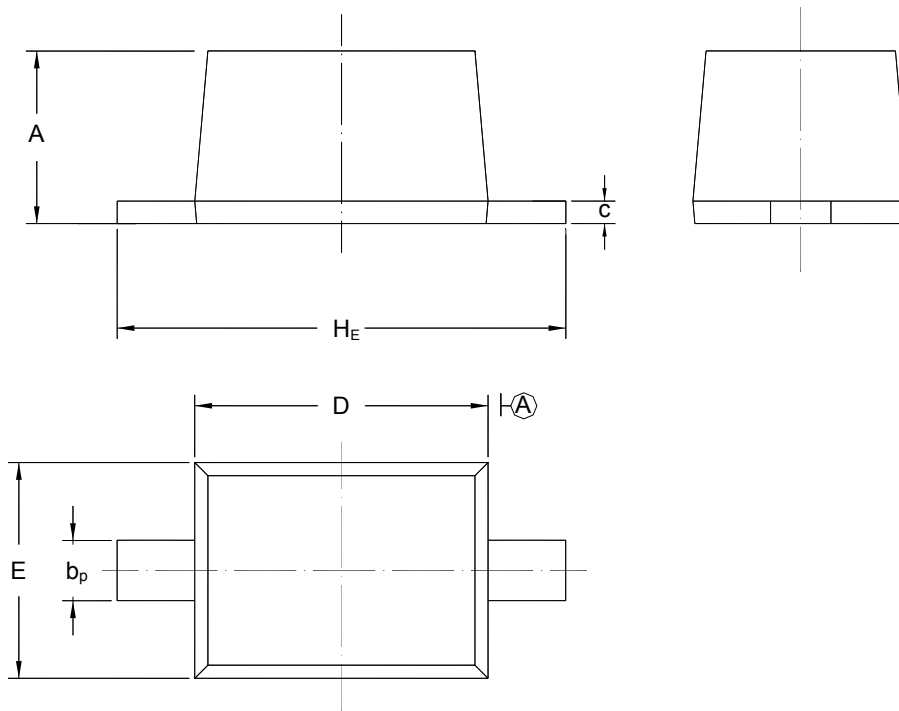
Fig. 2 Leakage Current vs Junction Temperature

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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30