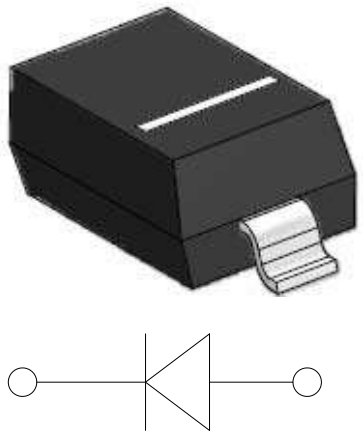
RoHS
COMPLIANT

BAV19WS THRU BAV21WS

Small-Signal Switching Diodes



Features

- VR 100V/150V/200V
- I_{FAV} 200mA

Typical Applications

- Extreme fast switches

Mechanical Data

- **Package**: SOD323
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

	Marking
BAV19WS	A8
BAV20WS	T2
BAV21WS	T3

■Maximum Ratings (Ta=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	Conditions	VALUE	
Repetitive peak reverse voltage	V_{RRM}	V		BAV19WS	120
				BAV20WS	200
				BAV21WS	250
Non-Repetitive Peak Forward Surge Current	I_{FSM}	mA	t=1s	500	
Average forward current	I_{FAV}	mA		200	
Power dissipation	P_{tot}	mW		250	
Maximum junction temperature	T_j	℃		-65 to +150	
Storage temperature range	T_{stg}	℃		-65 to +150	

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

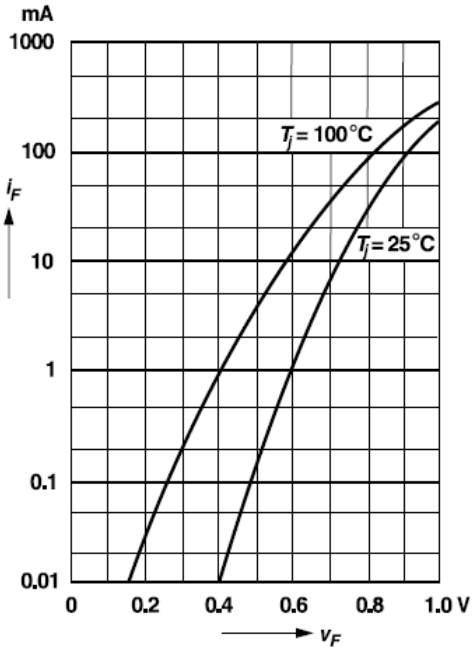
PARAMETER	SYMBOL	UNIT	Conditions		VALUE
Maximum Forward voltage	V_F	V	I_F=100mA		1.0
			I_F=200mA		1.25
Maximum Reverse current	I_R	nA	BAV19WS	VR=100V	100
			BAV20WS	VR=150V	
			BAV21WS	VR=200V	
Minimum Breakdown voltage	$V_{(BR)}$	V	BAV19WS	I_R=10uA	100
			BAV20WS	I_R=10uA	150
			BAV21WS	I_R=10uA	200
Maximum Diode capacitance	C_D	pF	V_R=0V, f =1MHz		5
Maximum Reverse recovery time	t_{rr}	ns	IF=IR=30 mA,RL=100Ω,IRR=3mA		50

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV19WS Thru BAV21WS	F2	Approximate 0.004	3000	30000	120000	7” reel

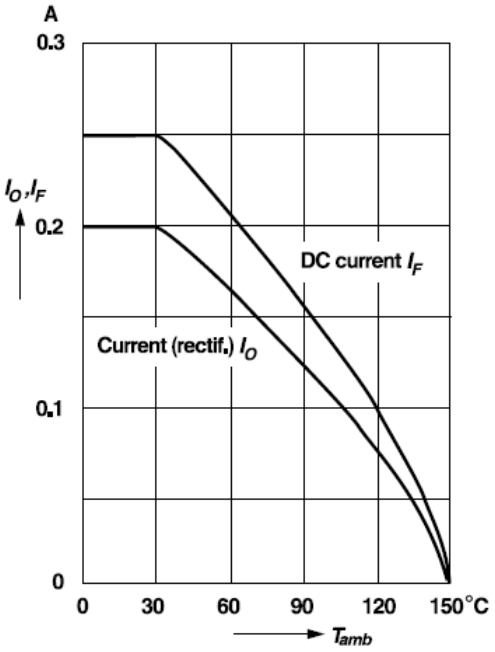
■Characteristics(Typical)

Forward characteristics



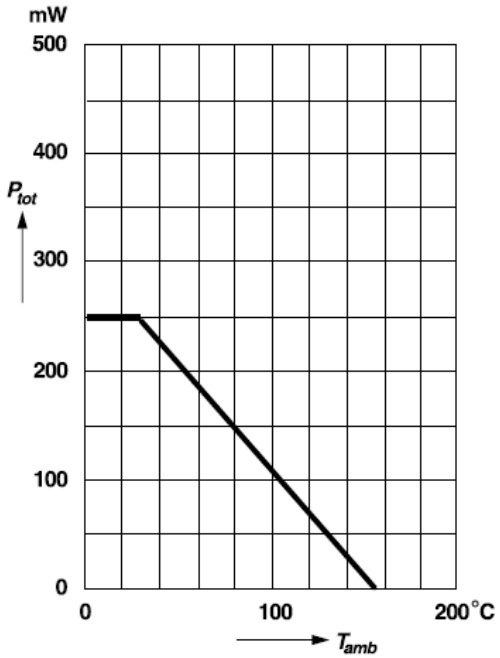
Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

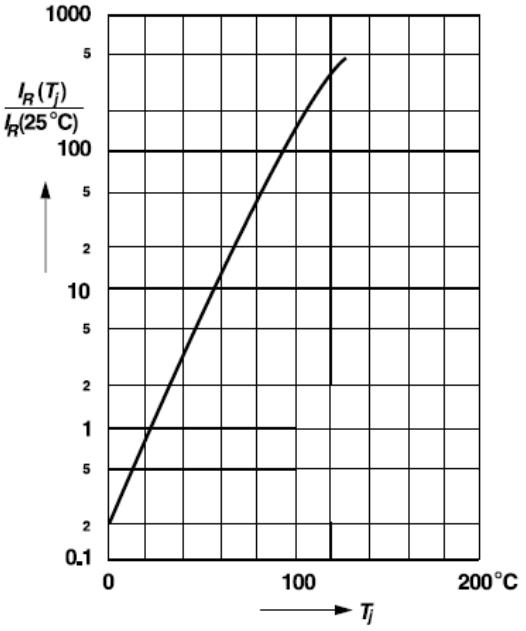


Admissible power dissipation versus ambient temperature

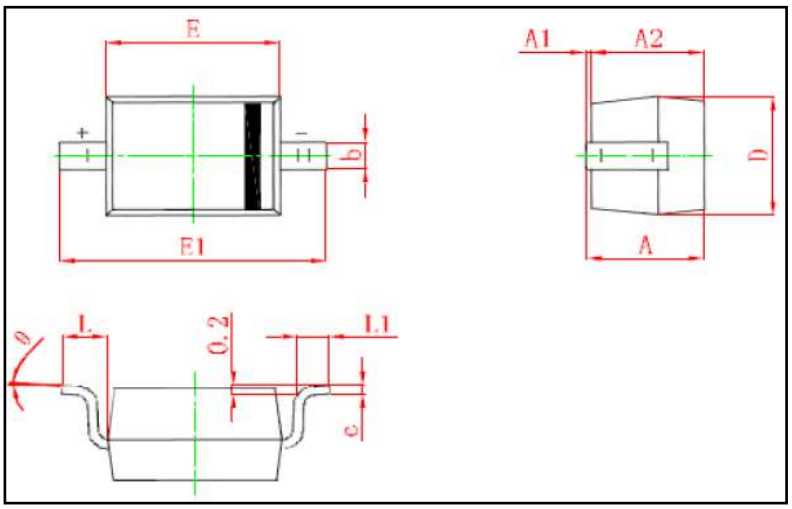
Valid provided that electrodes are kept at ambient temperature



Leakage current versus junction temperature

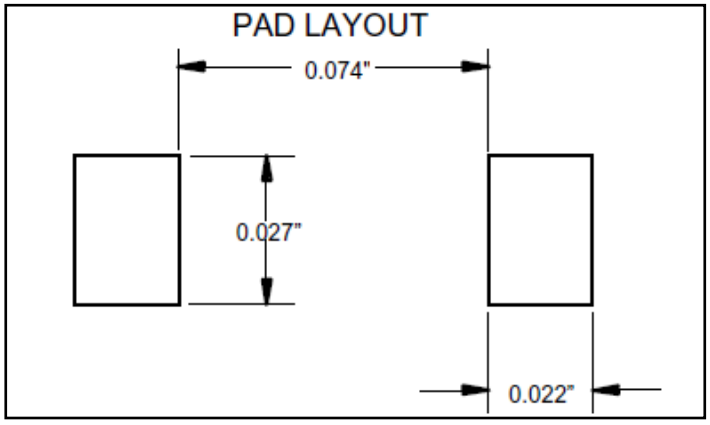


■ Outline Dimensions



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°

■ Soldering Footprint



Unit：inches

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