BAV19 THRU BAV21

SMALL SIGNAL DIODE

VOLTAGE: 100-200V **CURRENT: 200mA**

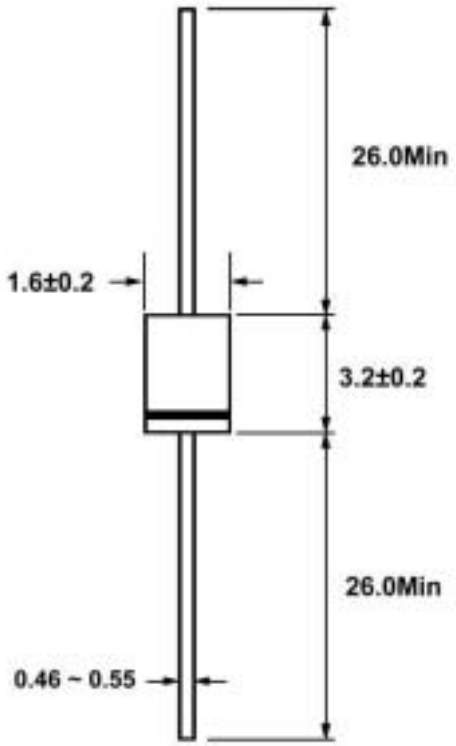
VOLTARISTECH INC.
POWER • PRECISION • INNOVATION

FEATURE

Silicon Epitaxial Planar Diodes
For general purpose

MECHANICAL DATA

Case: DO-35 Glass case
Polarity: color band denotes cathode
Mounting position: any
Weight: approx . 0.13g



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(inductive load rating at 25°C, unless otherwise stated)

Parameter	Symbol	Limit	Units
Recurrent Voltage BAV19 BAV20 BAV21	Vr	100 150 200	V
Recurrent Peak Reverse Voltage BAV19 BAV20 BAV21	Vrm	120 200 250	V
Average Forward Rectified Current Half-Wave Rectification With Resistive Load at Tamp=25°C(1)	If(av)	200	mA
Peak Forward Surge Current T<1.0S (1)	Ifsm	1.0	A
Power dissipation at tamp=25°C(1)	Ptot	500	mW
Thermal Resistance Junction to Ambient Air(1)	R(ja)	430	°C /W
Junction Temperature(1)	Tj	175	°C
Storage Temperature(1)	TS	-65 ~ +175	°C

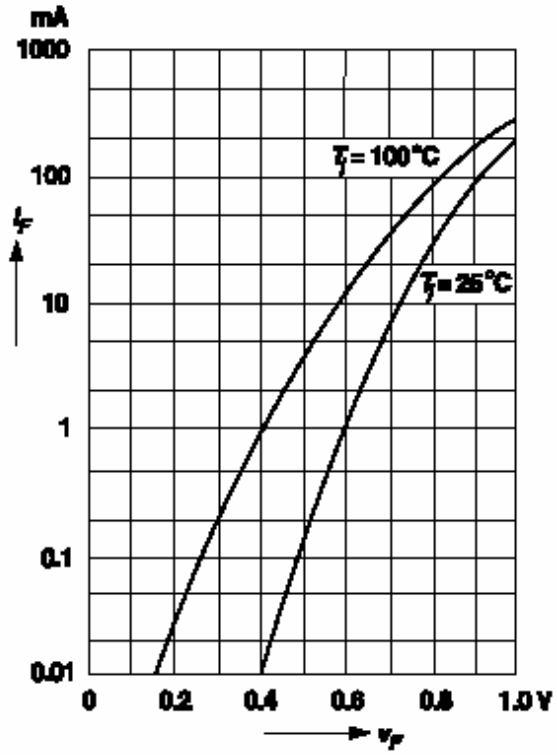
Note:
(1) Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

Electrical Characteristics(TJ = 25 ℃ unless otherwise noted)

parameter	symbol	Test Condition	min	typ	max	unit
Forward Voltage	Vf	If=100mA If=200mA			1.0 1.25	V
Leakage Current BAV19 BAV20 BAV21	Ir	Vr=100V Vr=100V,Tj=100℃ Vr=150V Vr=150V,Tj=100℃ Vr=200V Vr=200V,Tj=100℃			5.0 50	uA uA
Capacitance	Ctot	Vf=Vr=0V,f=1MHZ		1.5		pF
Dynamic Forward Resistance	rf	Rf=10mA		5		Ω
Reverse Recovery Time	Trr	If=30mA,Ir=30 mA Irr=3mA,Rl=100Ω			50	nS

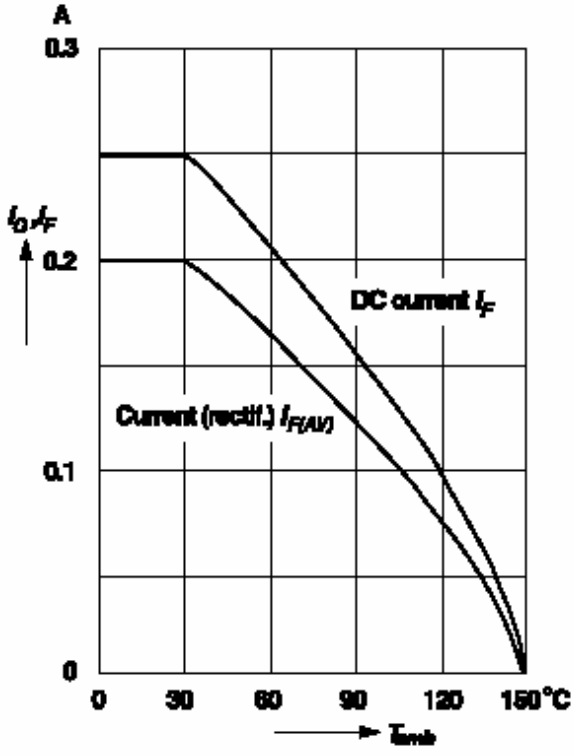
Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Forward characteristics



Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature



MARKING:

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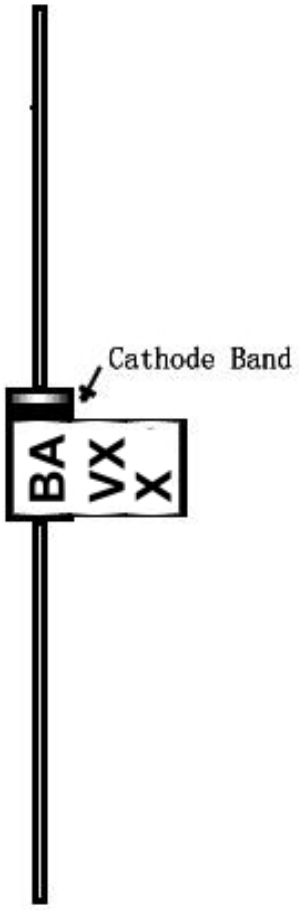
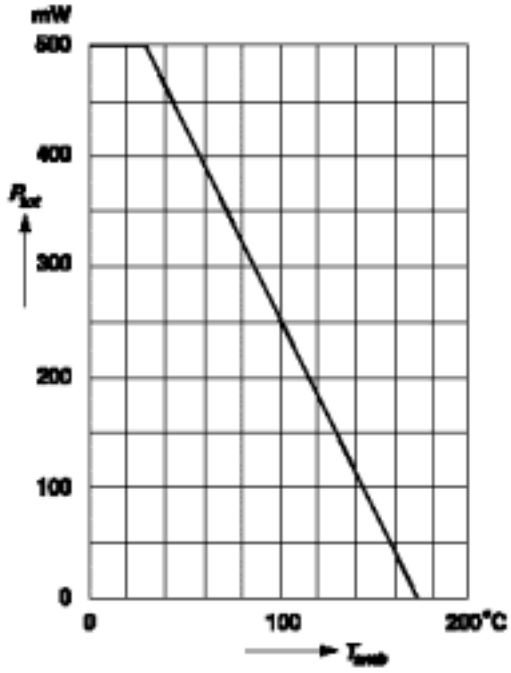


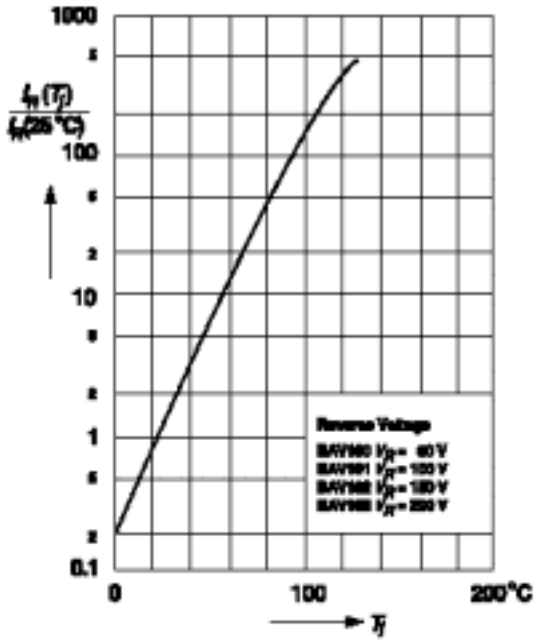
Ratings and Characteristic Curves (T_A = 25°C unless otherwise noted)

Admissible power dissipation versus ambient temperature

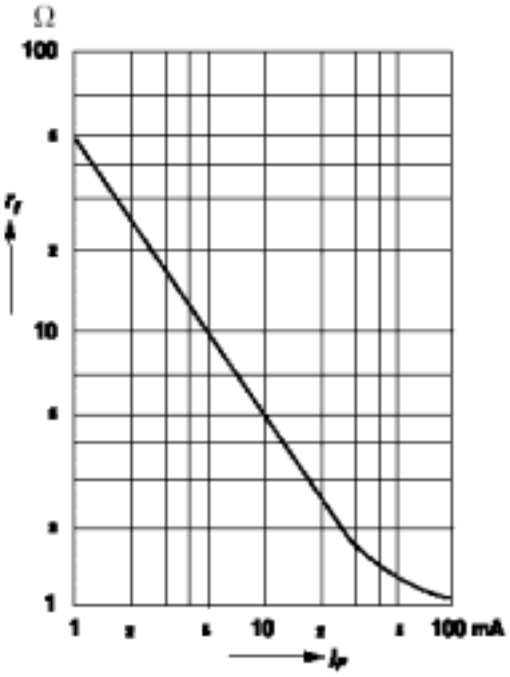
Valid provided that electrodes are kept at ambient temperature



Leakage current versus junction temperature



Dynamic forward resistance versus forward current



Capacitance versus reverse voltage