

BAV100 THRU BAV103

FEATURE

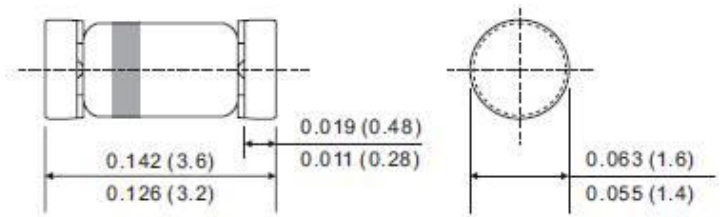
Silicon Epitaxial Planar Diodes

For general purpose

These diodes are also available in other case styles including: the DO-35 case with the type designations BAV19 to BAV21, the SOD-123 case with the type designations BAV19W to BAV21W, and the SOT-23 case with the type designation BAS19 - BAS21.

Small Signal Diodes

DO-213AA



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: DO-213AA Glass Case

Weight: approx. 0.05 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

Parameter	SYMBOLS	Value	UNITS
Reverse Voltage	BAV100	VR	60 v
	BAV101	VR	120 v
	BAV102	VR	200 v
	BAV103	VR	250 v
Forward DC Current at Tamb = 25 °C	IF	250 ^{b)}	mA
Rectified Current (Average)			
Half Wave Rectification with Resist. Load at Tamb = 25 °C and f 3 50 Hz	I0	200 ^{b)}	mA
Repetitive Peak Forward Current at f 3 50 Hz, Q = 180 °C, Tamb = 25 °C	IFRM	625 ^{b)}	mA
Surge Forward Current at t < 1 s, Tj = 25 °C	IFCM	1	A
Power Dissipation at Tamb = 25 °C	Ptot	400 ^{b)}	mW
Junction Temperature	Tj	175	°C
Storage Temperature Range	Ts	-65 to +175	°C

^{b)} Valid provided that electrodes are kept at ambient temperature.

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ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

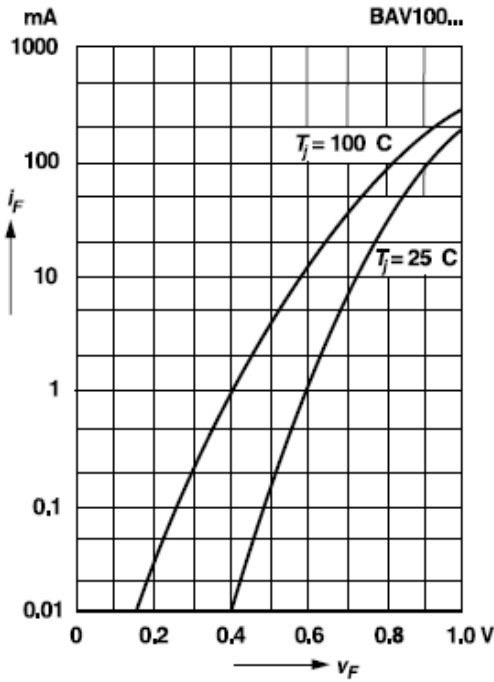
	SYMBOLS	Min	Typ.	Max	UNIT
Forward voltage at $I_F = 100 \text{ mA}$	V_F	-	-	1	V
Leakage Current					
at $V_R = 50 \text{ V}$	BAV100 I_R	-	-	100	nA
at $V_R = 50 \text{ V}, T_j = 100 \text{ °C}$	BAV100 I_R	-	-	15	mA
at $V_R = 100 \text{ V}$	BAV101 I_R	-	-	100	nA
at $V_R = 100 \text{ V}, T_j = 100 \text{ °C}$	BAV101 I_R	-	-	15	mA
at $V_R = 150 \text{ V}$	BAV102 I_R	-	-	100	nA
at $V_R = 150 \text{ V}, T_j = 100 \text{ °C}$	BAV102 I_R	-	-	15	mA
at $V_R = 200 \text{ V}$	BAV103 I_R	-	-	100	nA
at $V_R = 200 \text{ V}, T_j = 100 \text{ °C}$	BAV103 I_R	-	-	15	mA
Dynamic Forward Resistance					
at $I_F = 10 \text{ mA}$	r_f	-	5	-	W
Capacitance					
at $V_R = 0, f = 1 \text{ MHz}$	C_{tot}		1.5	-	pF
Reverse Recovery Time					
from $I_F = 30 \text{ mA}$ through $I_R = 30 \text{ mA}$ to $I_R = 3 \text{ mA}; R_L = 100 \text{ W}$	t_{rr}		-	50	ns
Thermal Resistance					
Junction to Ambient Air	R_{thJA}		-	0.375 ¹⁾	K/mW

¹⁾ Valid provided that electrodes are kept at ambient temperature.

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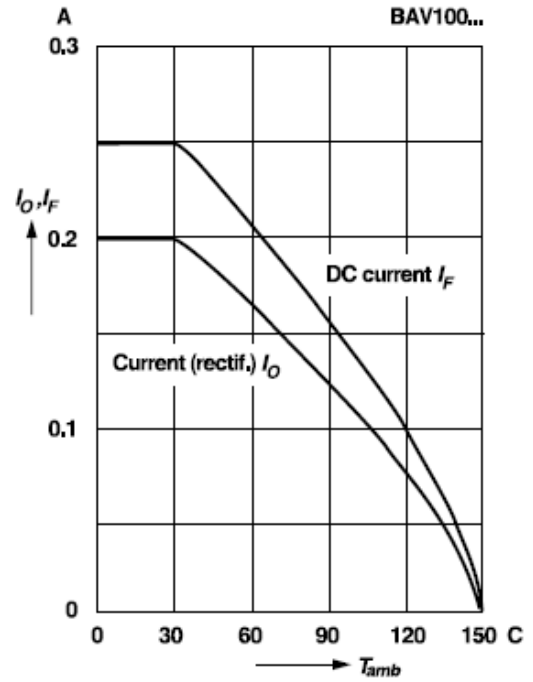
RATINGS AND CHARACTERISTIC CURVES BAV100 THRU BAV103

Forward characteristics



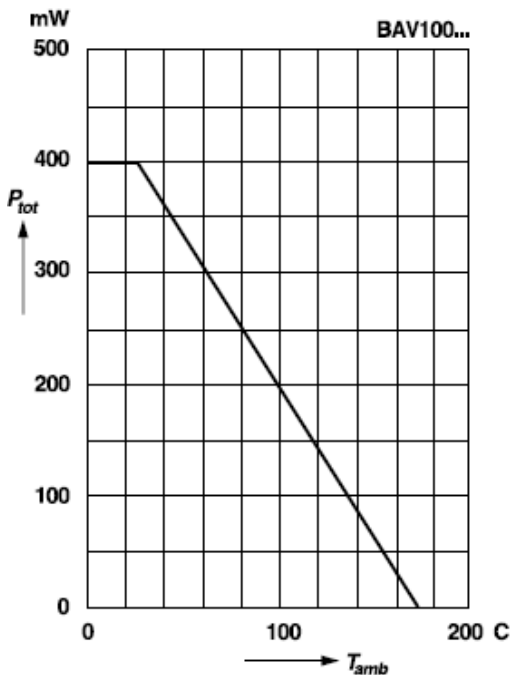
Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

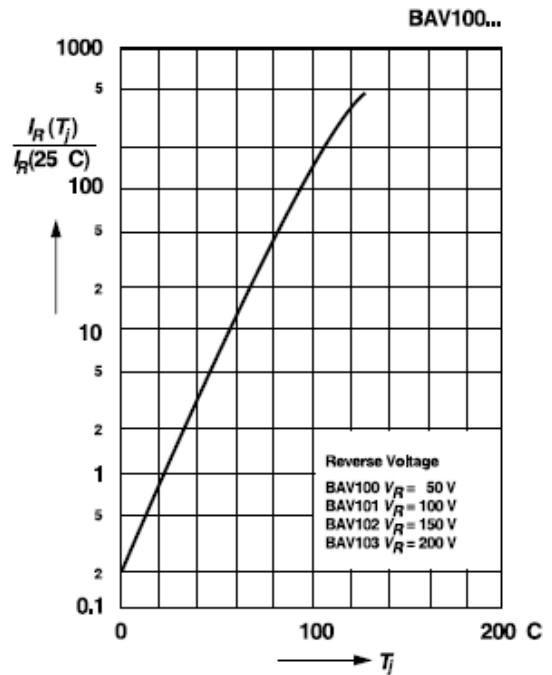


Admissible power dissipation versus ambient temperature

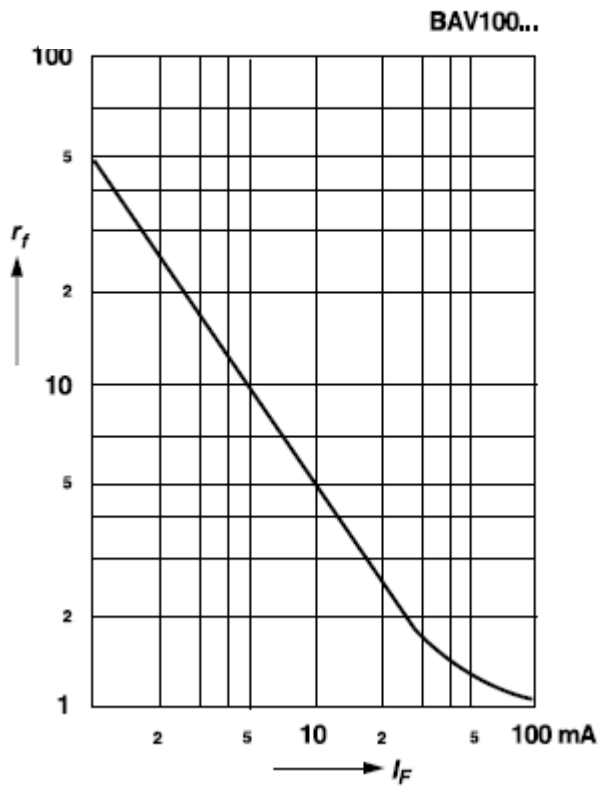
Valid provided that electrodes are kept at ambient temperature



Leakage current versus junction temperature



**Dynamic forward resistance
versus forward current**



**Capacitance
versus reverse voltage**

