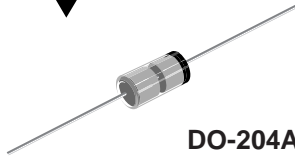
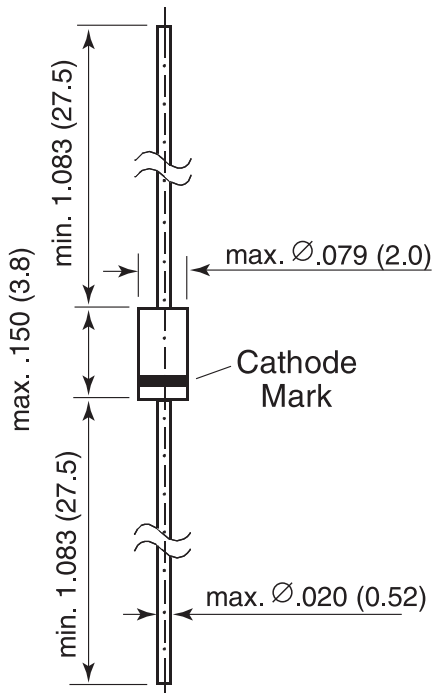


## Small-Signal Diodes


**DO-204AH (DO-35 Glass)**


Dimensions in inches and (millimeters)

### Features

- Silicon Epitaxial Planar Diodes
- For general purpose
- This diode is also available in other case styles including: the SOD-123 case with the type designation BAV19W to BAV21W, the MiniMELF case with the type designation BAV101 to BAV103, the SOT-23 case with the type designation BAS19 to BAS21, and the SOD-323 case with type designation BAV19WS to BAV21WS.

### Mechanical Data

**Case:** DO-35 Glass Case

**Weight:** approx. 0.13g

**Packaging Codes/Options:**

 F2/10K per Ammo tape (52mm tape), 50K/box  
 F3/10K per 13" reel (52mm tape), 50K/box

## Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Continuous Reverse Voltage	BAV19 BAV20 BAV21	100 150 200	V
Repetitive Peak Reverse Voltage	BAV19 BAV20 BAV21	120 200 250	V
Forward DC Current at T <sub>amb</sub> = 25°C <sup>(1)</sup>	I <sub>F</sub>	250	mA
Rectified Current (Average) Half Wave Rectification with Resist. Load at T <sub>amb</sub> = 25°C <sup>(1)</sup>	I <sub>F(AV)</sub>	200	mA
Repetitive Peak Forward Current at f ≥ 50Hz, Θ = 180°, T <sub>amb</sub> = 25°C <sup>(1)</sup>	I <sub>FRM</sub>	625	mA
Surge Forward Current at t < 1s, T <sub>j</sub> = 25°C	I <sub>FSM</sub>	1	A
Power Dissipation at T <sub>amb</sub> = 25°C <sup>(1)</sup>	P <sub>tot</sub>	500	mW
Thermal Resistance Junction to Ambient Air <sup>(1)</sup>	R <sub>θJA</sub>	430	°C/W
Junction Temperature <sup>(1)</sup>	T <sub>j</sub>	175	°C
Storage Temperature Range <sup>(1)</sup>	T <sub>s</sub>	-65 to +175	°C

**Note:**

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

# BAV19 thru BAV21

Vishay Semiconductors  
formerly General Semiconductor

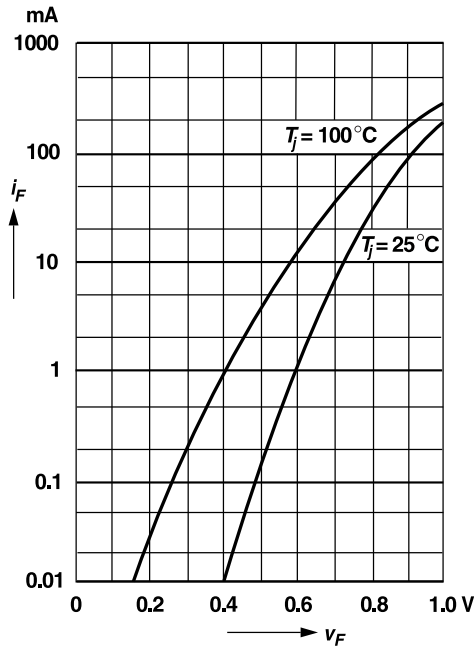


## Electrical Characteristics (T<sub>J</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> = 100mA I <sub>F</sub> = 200mA	—	—	1.00 1.25	V
Leakage Current	I <sub>R</sub>	V <sub>R</sub> = 100V V <sub>R</sub> = 150V V <sub>R</sub> = 150V, T <sub>j</sub> = 100°C V <sub>R</sub> = 200V V <sub>R</sub> = 200V, T <sub>j</sub> = 100°C	—	—	100 15 100 15 100 15	nA μA nA μA nA μA
Dynamic Forward Resistance	r <sub>f</sub>	I <sub>F</sub> = 10mA	—	5	—	Ω
Capacitance	C <sub>tot</sub>	V <sub>R</sub> = 0, f = 1MHz	—	1.5	—	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = 30mA, I <sub>R</sub> = 30mA I <sub>rr</sub> = 3mA, R <sub>L</sub> = 100Ω	—	—	50	ns

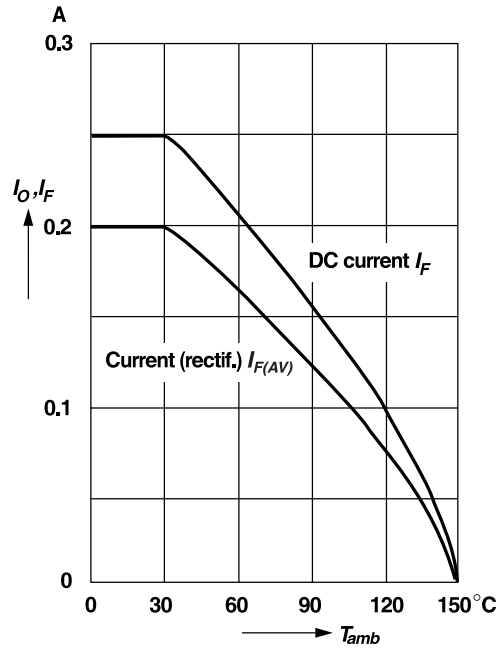
## Ratings and Characteristic Curves (T<sub>A</sub> = 25°C unless otherwise noted)

Forward characteristics



Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

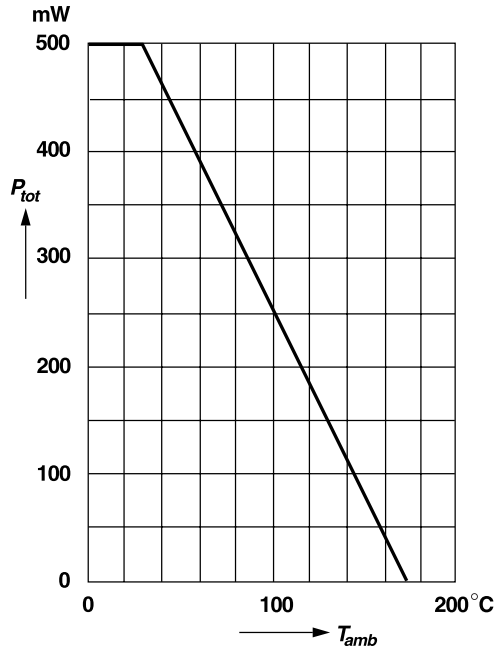




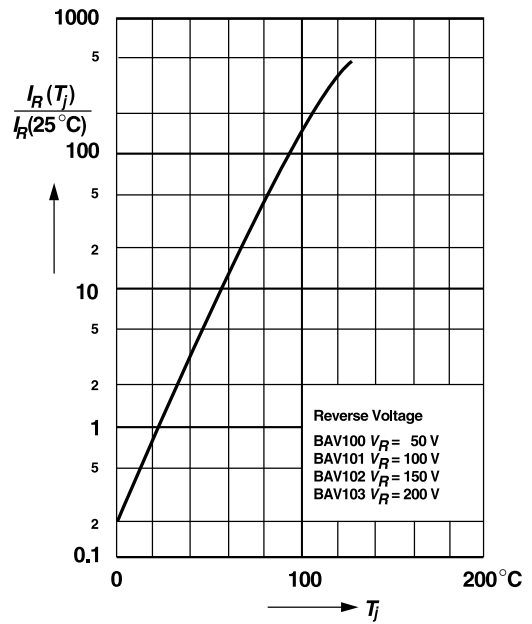
**Ratings and Characteristic Curves** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

**Admissible power dissipation versus ambient temperature**

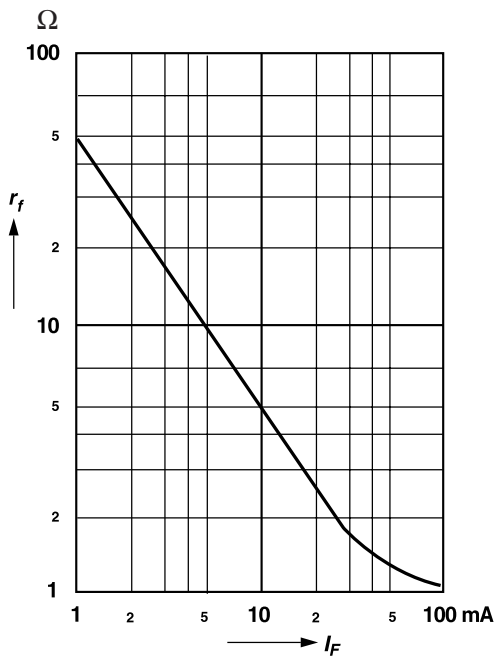
Valid provided that electrodes are kept at ambient temperature



**Leakage current versus junction temperature**



**Dynamic forward resistance versus forward current**



**Capacitance versus reverse voltage**

