



Micro Commercial Components



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BAV19 THRU BAV21

500mW Small Signal Diodes 120 to 250 Volts

DO-35 GLASS

Features

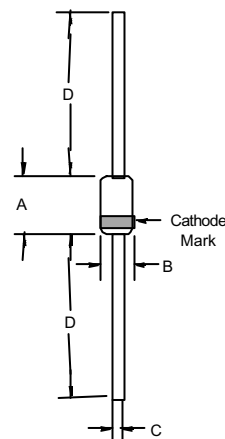
- Silicon Epitaxial Planar Diodes
- For General Purpose
- This diode is also available in other case.
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

Mechanical Data

- Case: DO-35 Glass Case
- Weight: approx. 0.13g
- Marking : Cathode band and type number
- Moisture Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Rating	Unit
V_R	Continuous Reverse Voltage	BAV19	100
		BAV20	150
		BAV21	200
V_{RRM}	Repetitive Peak Reverse Voltage	BAV19	120
		BAV20	200
		BAV21	250
I_F	Forward DC Current at $T_{amb}=25^{\circ}C^{(1)}$	250	mA
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb}=25^{\circ}C^{(1)}$	200	mA
I_{FRM}	Repetitive Peak Forward Current at $f > 50Hz, T_{amb}=25^{\circ}C^{(1)}$	625	mA
I_{FSM}	Surge Forward Current at $t < 1s, T_j = 25^{\circ}C$	1.0	A
P_{tot}	Power Dissipation at $T_{amb}=25^{\circ}C^{(2)}$	500	mW
T_j	Junction Temperature	-55 to +150	$^{\circ}C$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}C$



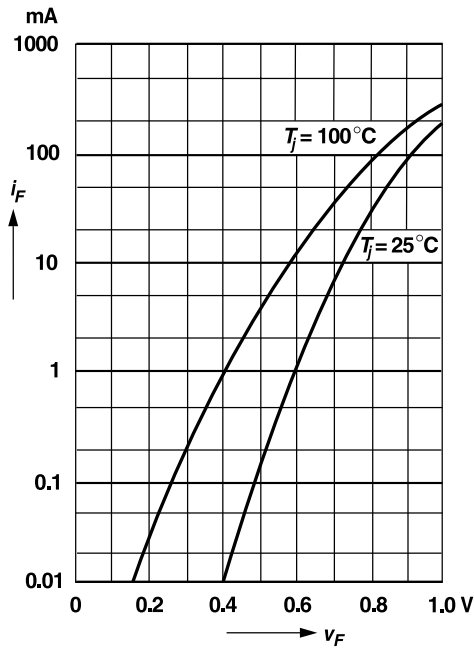
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
V_F	Forward Voltage ($I_F=100mA$) ($I_F=200mA$)	---	---	1.00	V
		---	---	1.25	
I_R	Leakage Current ($V_R=100V$) ($V_R=100V, T_j=100^{\circ}C$) ($V_R=150V$) ($V_R=150V, T_j=100^{\circ}C$) ($V_R=200V$) ($V_R=200V, T_j=100^{\circ}C$)	BAV19	---	100	nA
		BAV19	---	15	uA
		BAV20	---	100	nA
		BAV20	---	15	uA
		BAV21	---	100	nA
		BAV21	---	15	uA
r_f	Dynamic Forward Resistance ($I_F=10mA$)	---	5.0	---	OHM
C_{tot}	Capacitance ($V_R=0, f=1.0MHz$)	---	1.5	---	pF
t_{rr}	Reverse Recovery Time ($I_F=30mA, I_R=30mA$) ($I_{rr}=3.0mA, R_L=100OHMS$)	---	---	50	ns

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

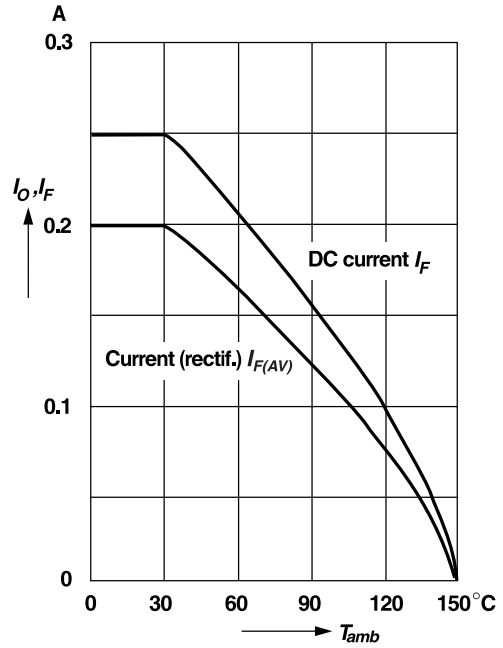
Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
2. Valid provided that leads are kept at ambient temperature at a distance of 8mm from case.

Forward characteristics



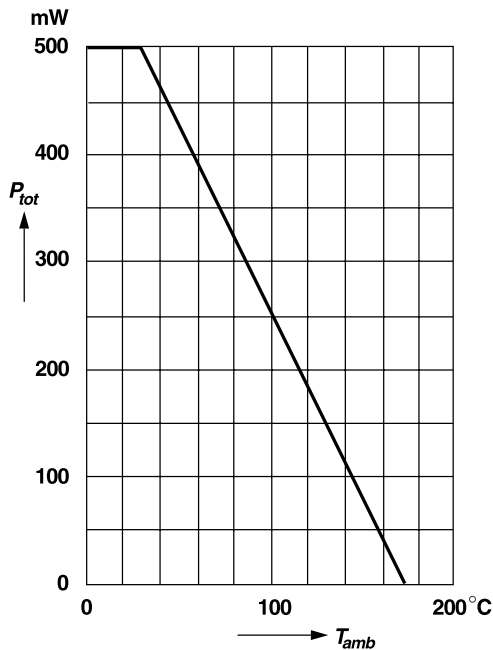
Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

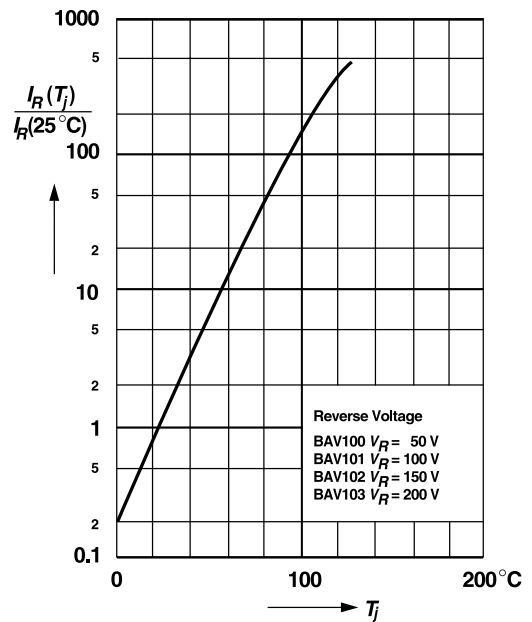


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

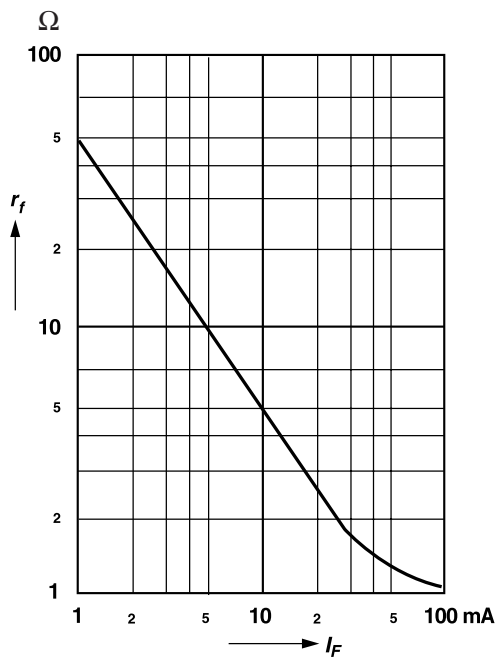


Leakage current versus junction temperature

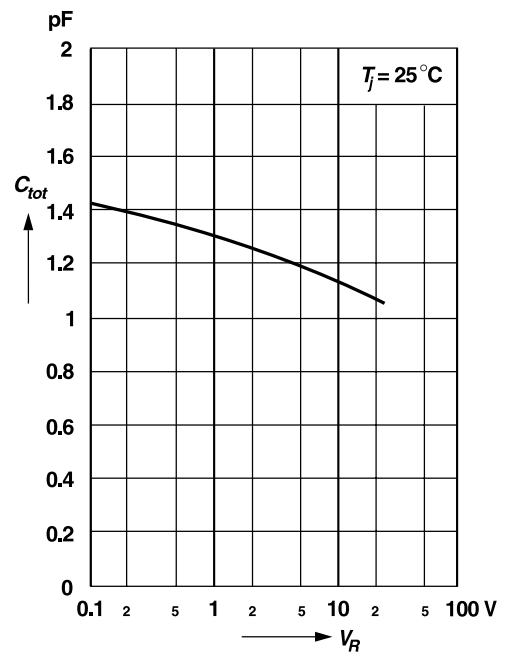


BAV19 thru BAV21

Dynamic forward resistance
versus forward current



Capacitance
versus reverse voltage





TM

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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