



**Micro Commercial Components** 



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# BAV19 THRU BAV21

## **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
	Continuous Reverse Voltage	BAV19	100	
V <sub>R</sub>		BAV20	150	V
		BAV21	200	
	Repetitive Peak Reverse Voltage	BAV19	120	
V <sub>RRM</sub>		BAV20	200	V
		BAV21	250	
l <sub>F</sub>	Forward DC Current at Tamb=25 <sup>o</sup> C <sup>(1)</sup>		250	mA
	Rectified Current (Average) Half	Wave		
F(AV)	Rectification with Resist. Load at		200	mA
. ( )	Tamb=25 <sup>o</sup> C <sup>(1)</sup>			
FRM	Repetitive Peak Forward Current at		625	mA
	f>50Hz, Tamb=25 <sup>o</sup> C <sup>(1)</sup>			
FSM	Surge Forward Current at t<1s, Tj=25 <sup>o</sup> C		1.0	Α
Ptot	Power Dissipation at Tamb=25 <sup>o</sup> C <sup>(2)</sup>		500	mW
Tj	Junction Temperature		-55 to +150	°C
T <sub>STG</sub>	Storage Temperature		-55 to +150	°C

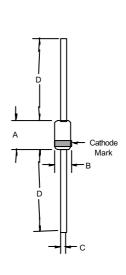


Symbol	Parameter		Min	Тур	Max	Units
V <sub>F</sub>	Forward Voltage	(I <sub>F</sub> =100mA)			1.00	V
		(I <sub>F</sub> =200mA)			1.25	v
I <sub>R</sub>	Leakage Current					
	(V <sub>R</sub> =100V)	BAV19			100	nA
	(VR=100V, Tj=100 <sup>0</sup> C)	BAV19			15	μA
	(V <sub>R</sub> =150V)	BAV20			100	nA
	(VR=150V, Tj=100 <sup>o</sup> C)	BAV20			15	μA
	(V <sub>R</sub> =200V)	BAV21			100	nA
	(VR=200V, Tj=100 <sup>0</sup> C)	BAV21			15	μA
r <sub>f</sub>	Dynamic Forward Resistance (⊧=10mA)			5.0		OHM
C <sub>tot</sub>	Capacitance (V <sub>R</sub> =0, f=1.0MHz)			1.5		pF
t <sub>rr</sub>	Reverse Recovery Time (I=30mA, I <sub>R</sub> =30mA) (Irr=3.0mA, R_=100OHM			50	ns	

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

 2. Valid provided that leads are kept at ambient temperature at a distance of 8mm from case. 500mW Small Signal Diodes 120 to 250 Volts





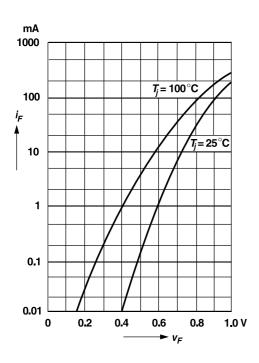
DIMENSIONS						
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α		.166		4.2		
В		.079		2.00		
С		.020		.52		
D	1.000		25.40			

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## BAV19 thru BAV21

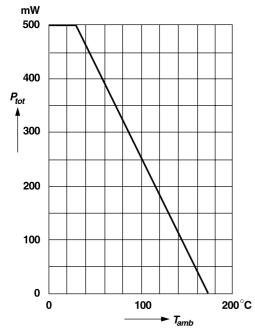


Forward characteristics

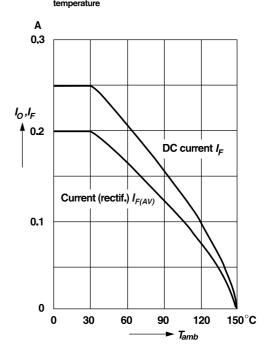


Admissible power dissipation versus ambient temperature

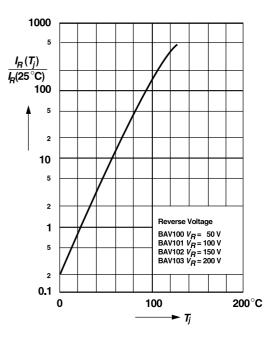
Valid provided that electrodes are kept at ambient temperature



Admissible forward current versus ambient temperature Valid provided that electrodes are kept at ambient temperature



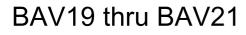
Leakage current versus junction temperature



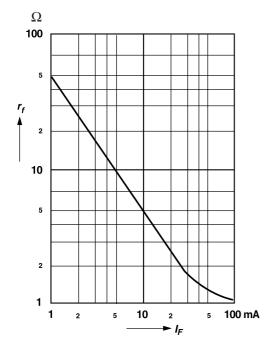
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#### **Revision: B**

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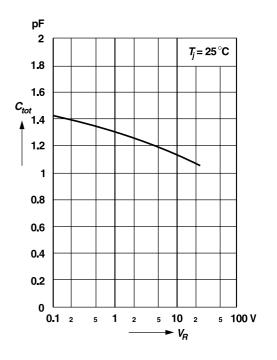






## Dynamic forward resistance versus forward current

Capacitance versus reverse voltage



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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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