

Micro Commercial Components

Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

### **Features**

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

### **Mechanical Data**

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking code: BAV19W=A8 BAV20W=T2 or A80 BAV21W=T3 or A82

### **Maximum Ratings**

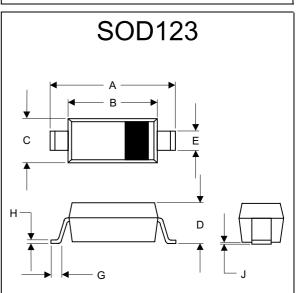
Symbol	Rating		Rating	Unit
	Continuous Reverse Voltage	BAV19W	100	
V <sub>R</sub>		BAV20W	150	V
		BAV21W	200	
	Repetitive Peak Reverse Voltage	BAV19W	120	
V <sub>RRM</sub>		BAV20W	200	V
		BAV21W	250	
L.	Forward DC Current at Tamb=25 <sup>o</sup> C <sup>(1)</sup>		250	mA
	Rectified Current (Average) Half	Wave		
I <sub>F(AV)</sub>	Rectification with Resist. Load at		200	mA
. ,	Tamb=25 <sup>o</sup> C <sup>(1)</sup>			
I <sub>FRM</sub>	Repetitive Peak Forward Current at f>50Hz,		625	mA
	Tamb=25 <sup>o</sup> C <sup>(1)</sup>			
I <sub>FSM</sub>	Surge Forward Current at t<1s, Tj=25 <sup>o</sup> C		1.0	А
Ptot	Power Dissipation at Tamb=25 <sup>o</sup> C <sup>(1)</sup>		410	mW
R <sub>JA</sub>	Thermal Resistance Junction to Ambient Air		375	mW
TJ	Junction Temperature		-55 to +150	°C
T <sub>STG</sub>	Storage Temperature		-55 to +150	°C

#### **Electrical Characteristics @ 25°C Unless Otherwise Specified**

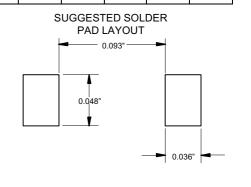
Symbol	Parameter			Тур	Max	Units
VF	Forward Voltage	(I <sub>F</sub> =100mA)			1.00	V
		(I <sub>F</sub> =200mA)			1.25	v
l <sub>R</sub>	Leakage Current					
	(V <sub>R</sub> =100V)	BAV19W			100	nA
	(VR=100V, Tj=100 <sup>0</sup> C)	BAV19W			15	uA
	(V <sub>R</sub> =150V)	BAV20W			100	nA
	(VR=150V, Tj=100 <sup>0</sup> C)	BAV20W			15	uA
	(V <sub>R</sub> =200V)	BAV21W			100	nA
	(VR=200V, Tj=100 <sup>o</sup> C)	BAV21W			15	uA
r <sub>f</sub>	Dynamic Forward Resistance (t=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 (ڸ=30mA, ڸ=30mA) (Irr=3.0mA, R_=100OHMS)				50	ns

BAV19W THRU BAV21W

## 410mW Small Signal Diodes 120 to 250 Volts



DIMENSIONS					
DIM	INCHES		N	NOTE	
	MIN	MAX	MIN	MAX	
Α	.140	.152	3.55	3.85	
В	.100	.112	2.55	2.85	
С	.055	.071	1.40	1.80	
D		.053		1.35	
Е	.012	.031	0.30	.78	
G	.006		0.15		
Н		.01		.25	
J		.006		.15	



Notes: 1. Valid provided that leads are kept at ambient temperature

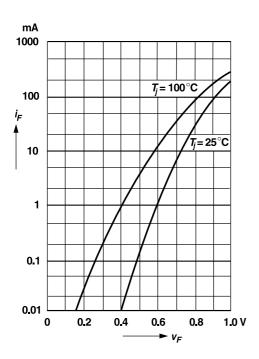
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**Revision:** 6

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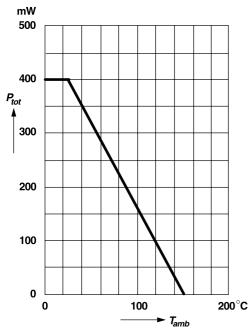
## BAV19W thru BAV21W

#### Forward characteristics



### Admissible power dissipation versus ambient temperature

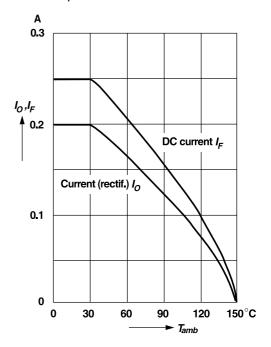
Valid provided that electrodes are kept at ambient temperature



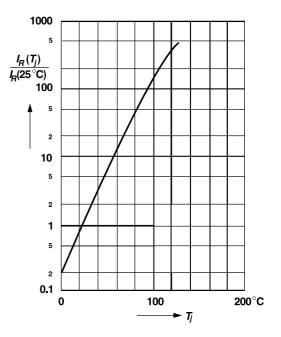


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Admissible forward current versus ambient temperature Valid provided that electrodes are kept at ambient temperature



Leakage current versus junction temperature



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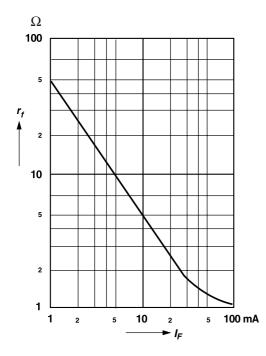
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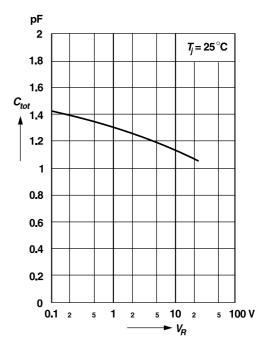
# BAV19W thru BAV21W



## Dynamic forward resistance versus forward current



Capacitance versus reverse voltage



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### **Ordering Information**

Ī	Device	Packing
	(Part Number)-TP	Tape&Reel3Kpcs/Reel

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