



Micro Commercial Components

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

BAV19WS THRU BAV21WS

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: BAV19WS=A8
BAV20WS=T2
BAV21WS=T3

Maximum Ratings

Symbol	Rating	Rating	Unit
V_R	Continuous Reverse Voltage	BAV19WS	100
		BAV20WS	150
		BAV21WS	200
V_{RRM}	Repetitive Peak Reverse Voltage	BAV19WS	120
		BAV20WS	200
		BAV21WS	250
I_F	Forward DC Current at $T_{amb}=25^{\circ}C^{(1)}$		250
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at $T_{amb}=25^{\circ}C^{(1)}$		200
I_{FRM}	Repetitive Peak Forward Current at $f>50Hz$, $T_{amb}=25^{\circ}C^{(1)}$		625
I_{FSM}	Surge Forward Current at $t<1s$, $T_j=25^{\circ}C$		1.0
P_{tot}	Power Dissipation at $T_{amb}=25^{\circ}C^{(1)}$		410
R_{JA}	Thermal Resistance Junction to Ambient Air		375
T_j	Junction Temperature		-55 to +150
T_{STG}	Storage Temperature		-55 to +150

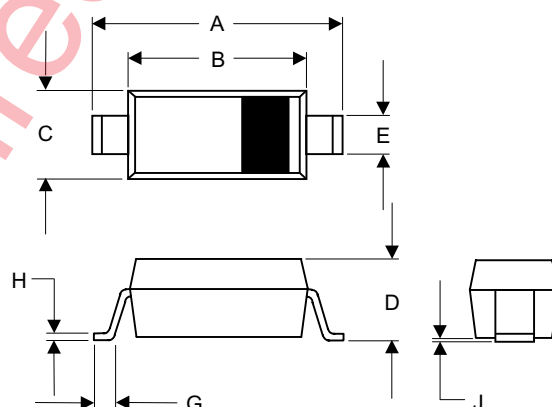
Electrical Characteristics @ 25°C Unless Otherwise Specified

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 ($V_R=100V$) ($V_R=100V, T_j=100^{\circ}C$) ($V_R=150V$) ($V_R=150V, T_j=100^{\circ}C$) ($V_R=200V$) ($V_R=200V, T_j=100^{\circ}C$)	BAV19WS	---	100	nA
		BAV19WS	---	15	uA
		BAV20WS	---	100	nA
		BAV20WS	---	15	uA
		BAV21WS	---	100	nA
		BAV21WS	---	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

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

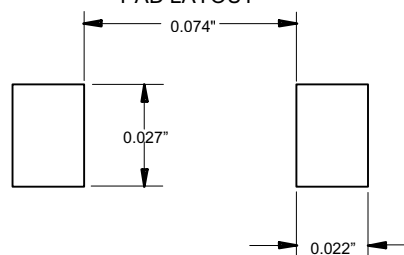
410mW
Small Signal
Diodes
120 to 250 Volts

SOD-323



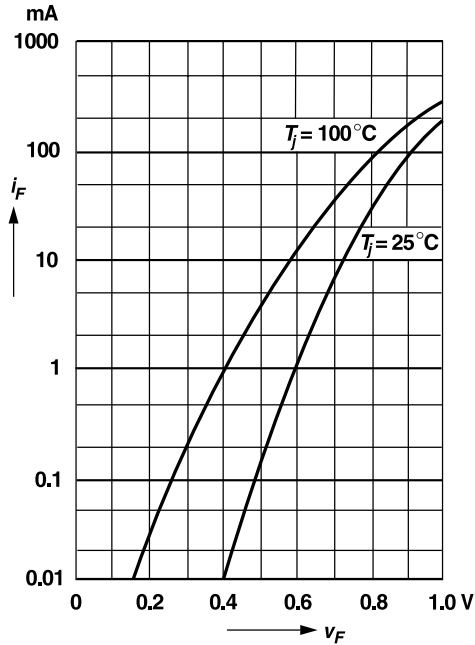
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	----	.006	----	0.15	

SUGGESTED SOLDER PAD LAYOUT



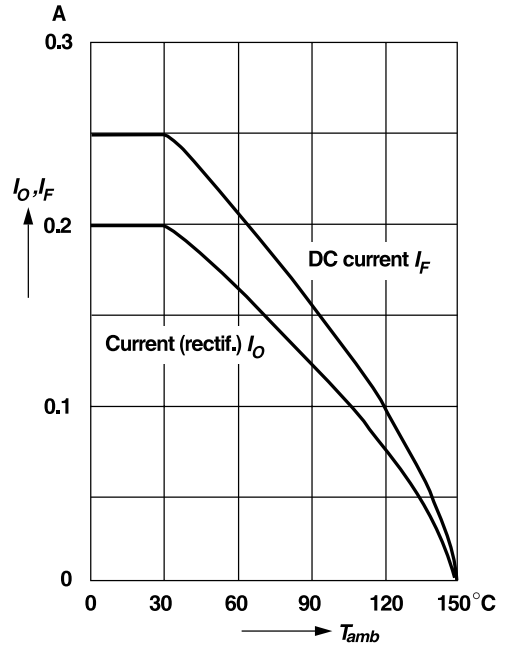
BAV19WS thru BAV21WS

Forward characteristics



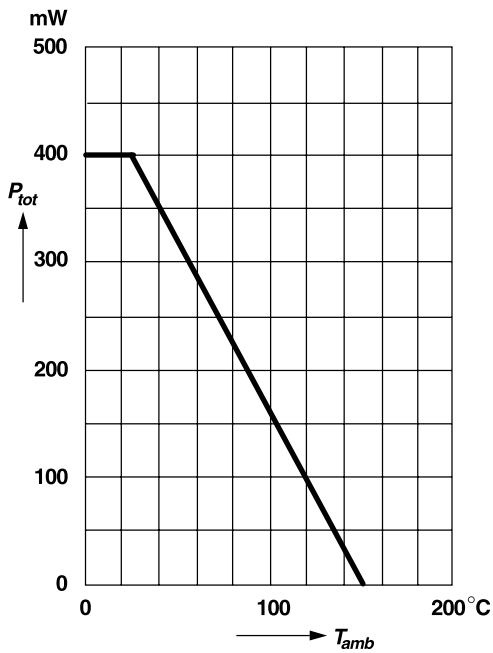
Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

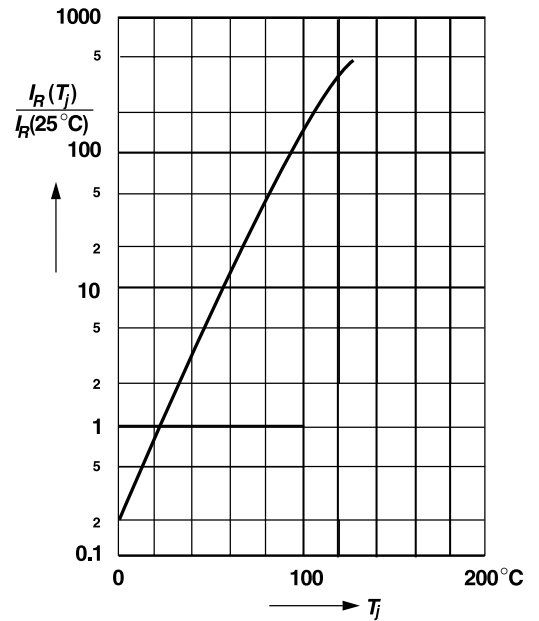


Admissible power dissipation versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

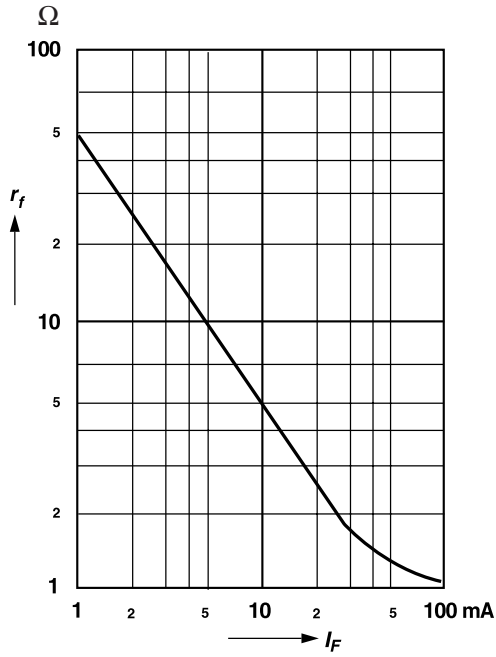


Leakage current versus junction temperature

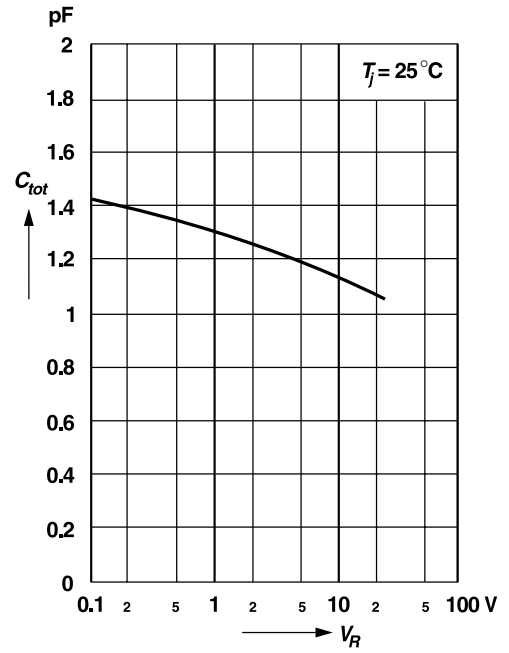


BAV19WS thru BAV21WS

Dynamic forward resistance
versus forward current



Capacitance
versus reverse voltage





Micro Commercial Components

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp . reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes .
Micro Commercial Components Corp . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp* . and all the companies whose products are represented on our website, harmless against all damages.

*****APPLICATIONS DISCLAIMER*****

Products offer by *Micro Commercial Components Corp* . are not intended for use in Medical, Aerospace or Military Applications.