Micro Commercial Components
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BAV19WS THRU BAV21WS

410mW Small Signal Diodes 120 to 250 Volts

Features

- Silicon Epitaxial Planar Diodes
- For General Purpose
- This diode is also available in other case.

Mechanical Data

- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Marking code: BAV19WS=A8
  BAV20WS=T2
  BAV21WS=T3

Maximum Ratings

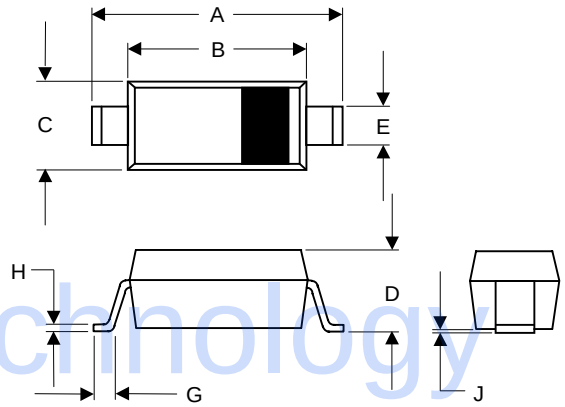
Symbol	Rating		Rating	Unit
V_R	Continuous Reverse Voltage	BAV19WS BAV20WS BAV21WS	100 150 200	V
V_{RRM}	Repetitive Peak Reverse Voltage	BAV19WS BAV20WS BAV21WS	120 200 250	V
I_F	Forward DC Current at Tamb=25°C(1)		250	mA
$I_{F(AV)}$	Rectified Current (Average) Half Wave Rectification with Resist. Load at Tamb=25°C(1)		200	mA
I_{FRM}	Repetitive Peak Forward Current at f>50Hz, Tamb=25°C(1)		625	mA
I_{FSM}	Surge Forward Current at t<1s, Tj=25°C		1.0	A
P_{tot}	Power Dissipation at Tamb=25°C(1)		410	mW
R_{JA}	Thermal Resistance Junction to Ambient Air		375	mW
T_J	Junction Temperature		-55 to +150	°C
T_{STG}	Storage Temperature		-55 to +150	°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 1.25	V
I_R	Leakage Current (V_R=100V) (VR=100V, Tj=100°C) (V_R=150V) (VR=150V, Tj=100°C) (V_R=200V) (VR=200V, Tj=100°C)	BAV19WS BAV19WS BAV20WS BAV20WS BAV21WS BAV21WS	--- --- --- --- --- ---	--- --- --- --- --- ---	100 15 100 15 100 15	nA uA nA uA nA 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) (Irr=3.0mA, R_L=100OHMS)		---	---	50	ns

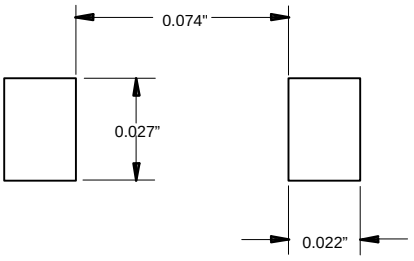
*(1) Valid provided that leads are kept at ambient temperature

SOD323

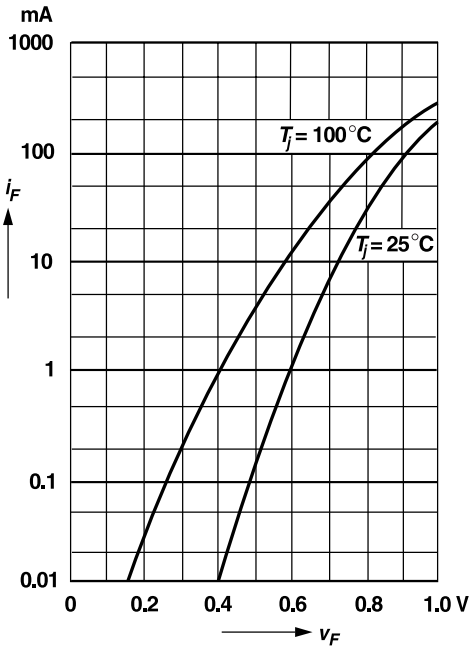


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT

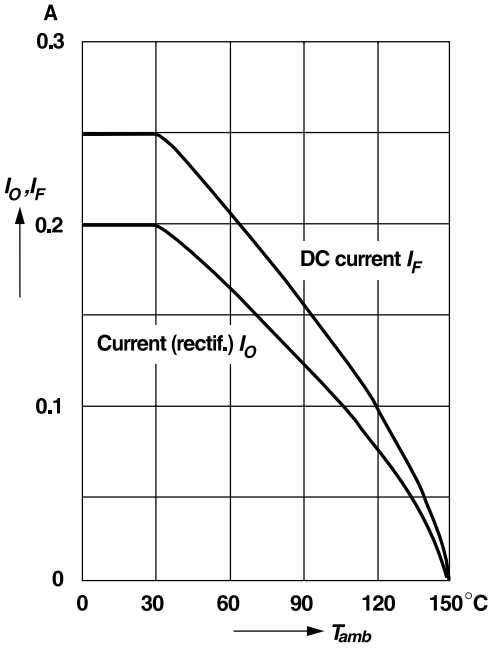


Forward characteristics



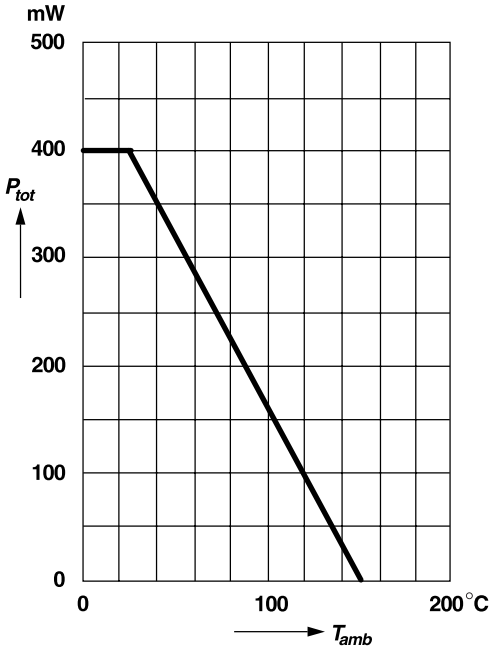
Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

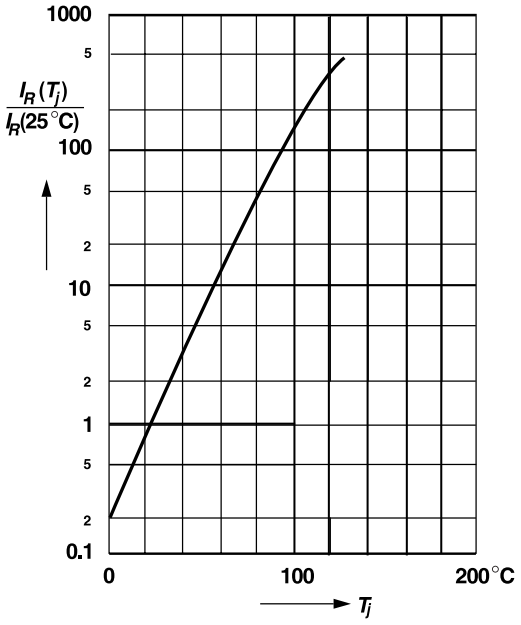


Admissible power dissipation versus ambient temperature

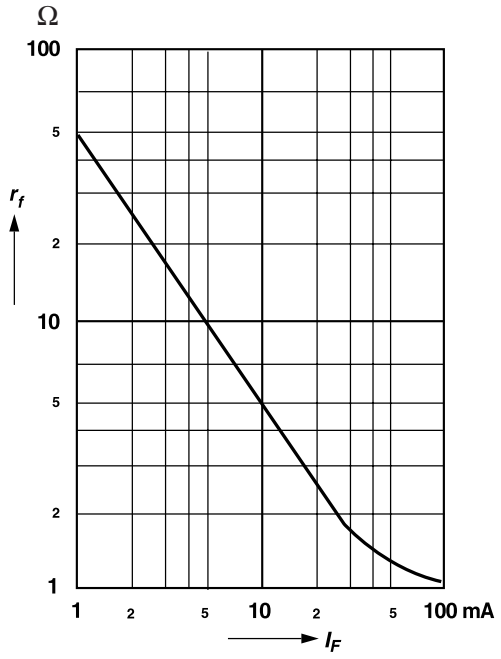
Valid provided that electrodes are kept at ambient temperature



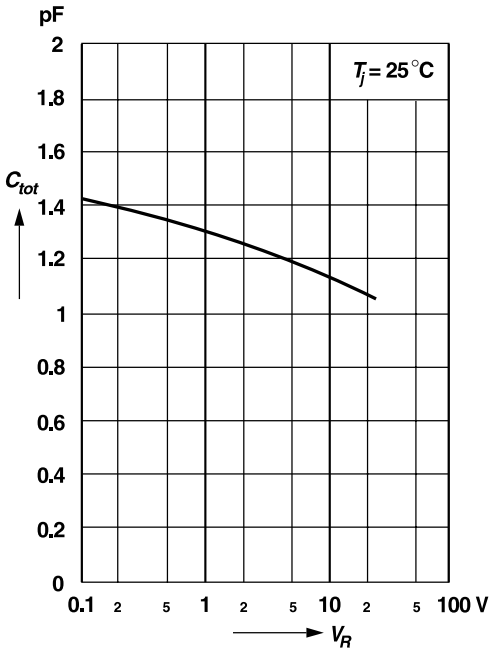
Leakage current versus junction temperature



Dynamic forward resistance versus forward current



Capacitance versus reverse voltage



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