Micro Commercial Components

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BAV100 THRU BAV103

Small Signal Diodes

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Moisture Sensitivity Level 1
- Silicon Epitaxial Planar Diodes
- These diodes are also available in other case styles including: the DO-35 case with the type designations BAV19 to BAV21, the SOD-123 case with the type designations BAV19W to BAV21W, the SOT-23 case with the type designations BAS19 to BAS21, and the SOD-323 case with type designations BAV19WS to BAV21WS.

Maximum Ratings

Continuous Reverse Voltage BAV100 BAV101 BAV102 BAV103	V_R	50V 100V 150V 200V	T_A=25°C
Repetitive Peak Reverse Voltage BAV100 BAV101 BAV102 BAV103	V_{RRM}	60V 120V 200V 250V	T_A=25°C
Forward DC Current	I_F	250mA	T_A=25°C(1)
Rectified Current (Average) Half Wave Rectification with Resist. Load	$I_{(FAV)}$	200mA	f>50Hz, T_A=25°C
Repetitive Peak Forward Current	I_{FRM}	625mA	f>50Hz, T_A=25°C(1)
Surge Forward Current	I_{FSM}	1.0A	T<1s, Tj =25°C
Power Dissipation	P_{TOT}	400mW	T_A=25°C
Thermal Resistance Junction to Ambient Air(2)	T_A	375°C/W	
Operating and Storage temperature Range	T_S, T_{STG}	-55 to +150°C	

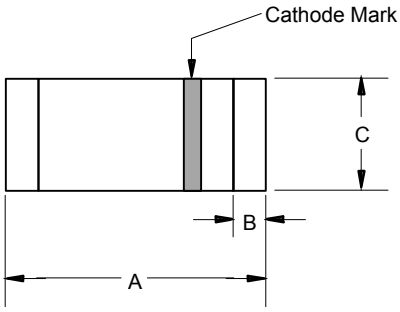
Note: (1) Valid provided that electrodes are kept at ambient temperature

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Forward Voltage I_F = 100mA I_F = 200mA	V_F	1.00V 1.25V	T_A=25°C
Maximum Leakage current BAV100 BAV100 BAV101 BAV101 BAV102 BAV102 BAV103 BAV103	I_R	100nA 15uA 100nA 15uA 100nA 15uA 100nA 15uA	V_R=50V V_R=50V, Tj=100°C V_R=100V V_R=100V, Tj=100°C V_R=150V V_R=150V, Tj=100°C V_R=200V V_R=200V, Tj=100°C
Typical Capacitance	C_{TOT}	1.5pF	V_R=0V, f=1.0MHz
Maximum Reverse recovery time	t_{rr}	50ns	I_F=30mA, I_R=30mA I_{rr}=3.0mA, R_L=100 OHM
Typical Dynamic Forward Resistance	R_F	5.0 OHM	I_F=10mA

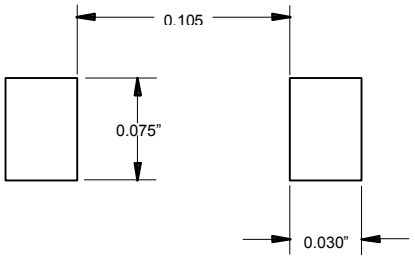
Notes:1. Lead in Glass Exemption Applied, see EU Directive Annex 5.
2. Valid provided that electrodes are kept at ambient temperature

MINIMELF(SOD-80C)

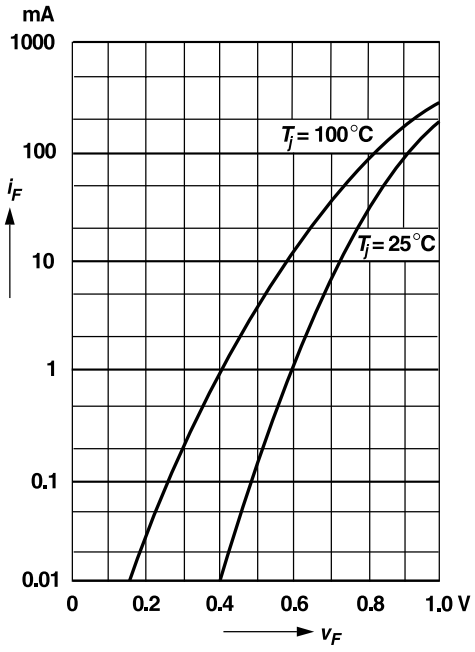


DIMENSION					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	

SUGGESTED SOLDER PAD LAYOUT

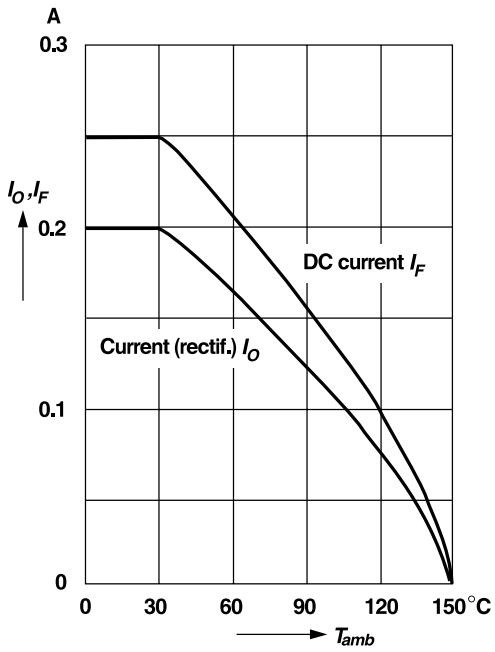


Forward characteristics



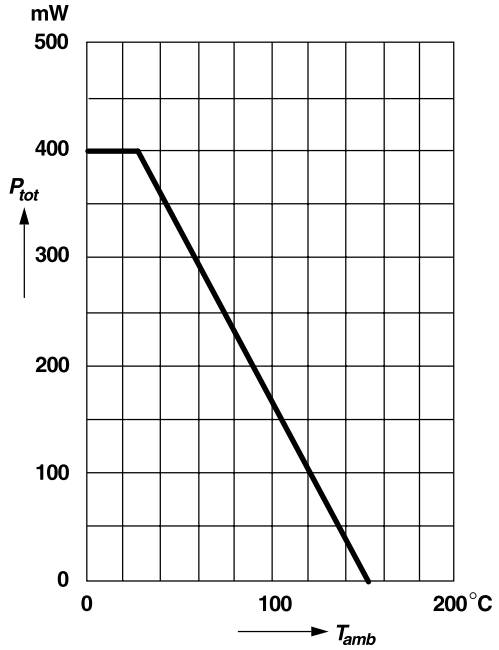
Admissible forward current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature

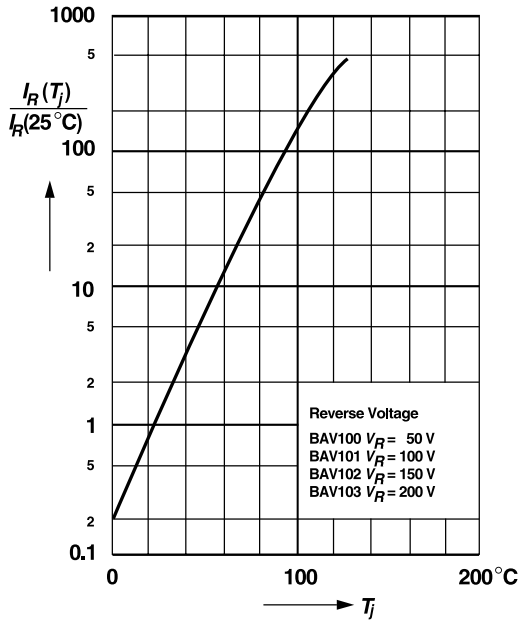


Admissible power dissipation versus ambient temperature

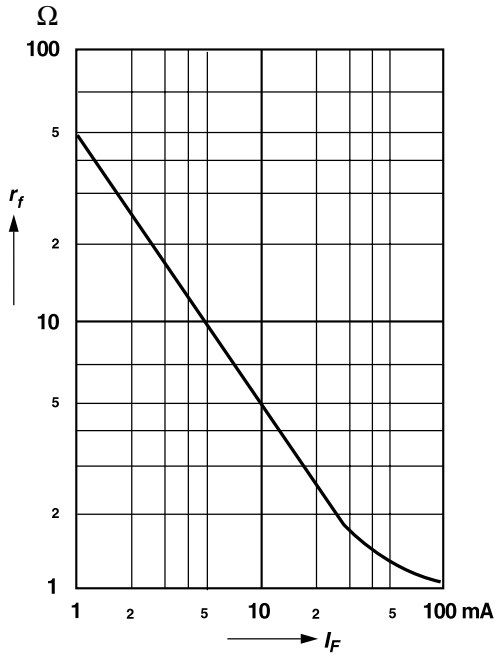
Valid provided that electrodes are kept at ambient temperature



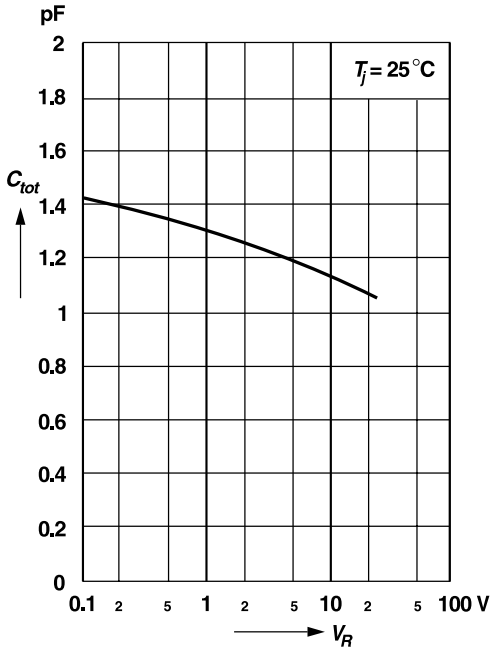
Leakage current versus junction temperature



Dynamic forward resistance versus forward current



Capacitance versus reverse voltage



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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