

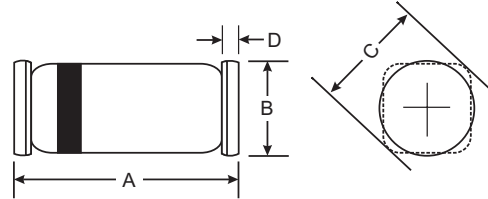


# BAV201 - BAV203

## SURFACE MOUNT SWITCHING DIODE

### Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Outline Similar to JEDEC 213AA



### Mechanical Data

- Case: QuadroMELF, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.034 grams (approx.)

QuadroMELF		
Dim	Min	Max
A	3.3	3.7
B	1.4	1.6
C	1.7 $\varnothing$ Typical	
D	0.3 Typical	
All Dimensions in mm		

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	BAV201	BAV202	BAV203	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	120	200	250	V
Working Peak Reverse Voltage DC Blocking Voltage	$V_{RWM}$ $V_R$	100	150	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	71	106	141	V
Forward Continuous Current (Note 1)	$I_{FM}$	250			mA
Average Rectified Output Current (Note 1)	$I_O$	125			mA
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$	$I_{FSM}$	1.0			A
Power Dissipation	$P_d$	500			mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300			K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +175			$^\circ\text{C}$

### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Maximum Forward Voltage	$V_{FM}$	—	1.0	V	$I_F = 100\text{mA}$
Maximum Peak Reverse Current @ Rated DC Blocking Voltage	$I_{RM}$	—	100 15	nA $\mu\text{A}$	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$
Junction Capacitance	$C_j$	—	1.5	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	$t_{rr}$	—	50	ns	$I_F = I_R = 30\text{mA}$ , $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

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

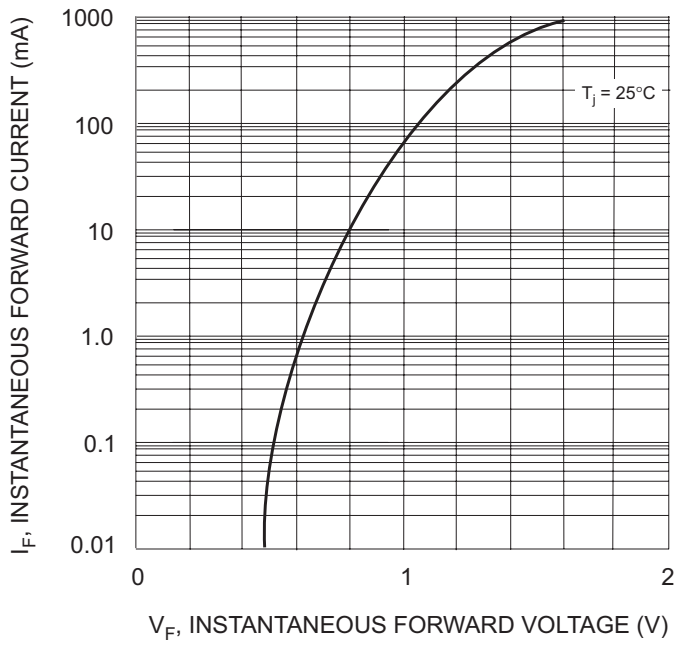


Fig. 1 Forward Characteristics

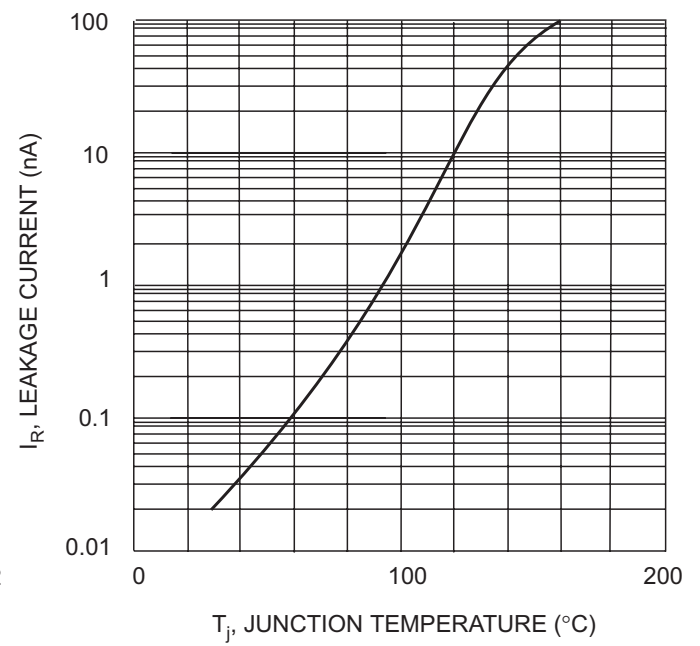


Fig. 2 Leakage Current vs Junction Temperature