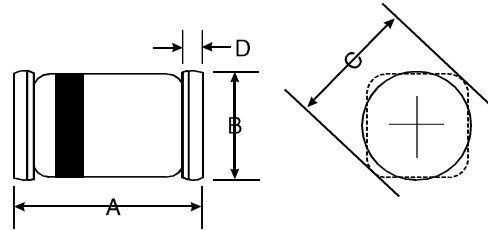


Features

Fast Switching Speed
 Surface Mount Package Ideally Suited for Automatic Insertion
 For General Purpose Switching Applications
 High Conductance
 Fits on SOD-323 / SOT-23 Footprint



Mechanical Data

Case: MicroMELF, Glass
 Terminals: Solderable per MIL-STD-202, Method 208
 Polarity: Cathode Band
 Marking: Cathode Band Only
 Weight: 0.012 grams (approx.)

MicroMELF		
Dim	Min	Max
A	1.8	2.0
B	1.20	1.25
C	1.35	Typical
All Dimensions in mm		

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

Characteristic	Symbol	BAV301	BAV302	BAV303	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_{JA}	300			K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175			C

Electrical Characteristics @ $T_A = 25\text{ C}$ 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 A	$T_A = 25\text{ C}$ $T_A = 100\text{ C}$
Junction Capacitance	C_j		1.5	pF	$V_R = 0, f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}		50	ns	$I_F = I_R = 30\text{mA}$, $I_{rr} = 0.1 \times I_R, R_L = 100$

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

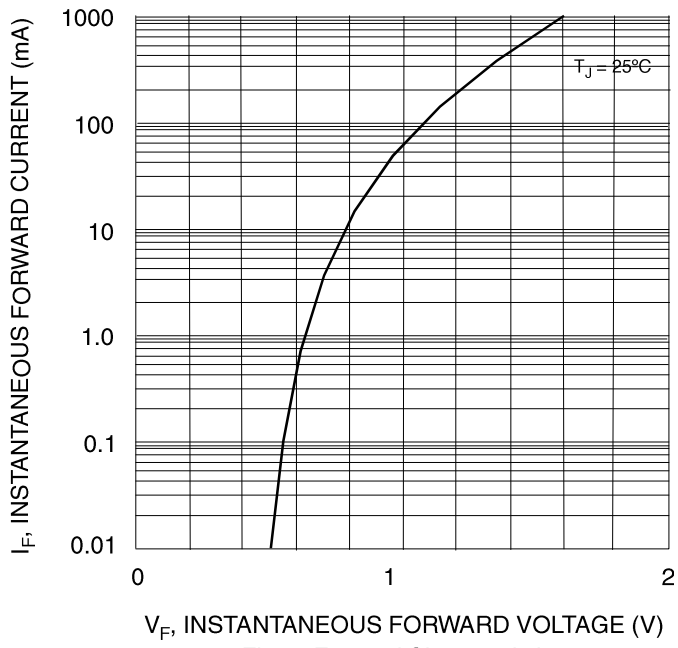


Fig. 1 Forward Characteristics

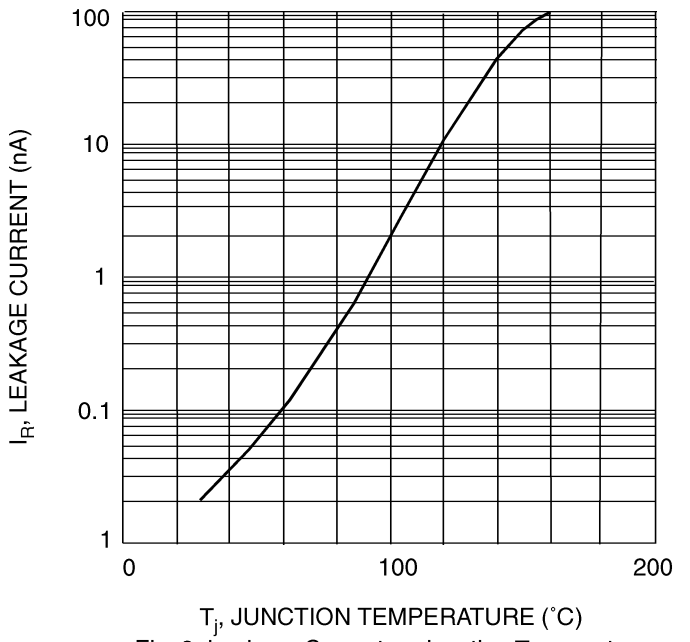


Fig. 2 Leakage Current vs Junction Temperature