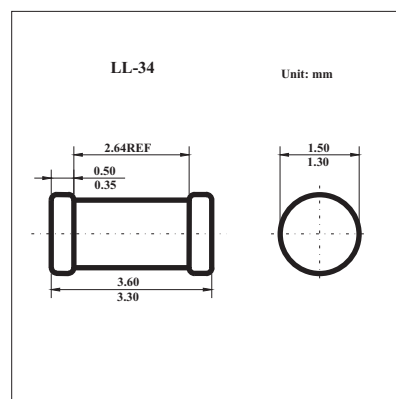


Surface Mount Switching Diode

BAV103

■ Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Working Peak Reverse Voltage	V_{RWM}	200	V
DC Blocking Voltage	V_R	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	141	V
Average Rectified Output Current *1	I_o	125	mA
Forward Continuous Current *1	I_{FM}	250	mA
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$	I_{FSM}	1	A
Power Dissipation	P_D	500	mW
Thermal Resistance Junction to Ambient Air *1	$R_{\theta JA}$	300	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +175	°C

*1. Valid provided that electrodes are kept at ambient temperature.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum Forward Voltage	V_{FM}	$I_F = 100\text{mA}$			1	V
Maximum Peak Reverse Current @ Rated DC Blocking Voltage	I_{RM}	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$			100 15	nA μA
Junction Capacitance	C_j	$V_R = 0, f = 1.0\text{MHz}$			1.5	pF
Reverse Recovery Time	t_{rr}	$I_F = I_R = 30\text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100\Omega$			50	ns

■ Ordering Information

Device	Packaging	Shipping
BAV103	LL34	2500/Tape & Reel

BAV103

■ Typical Characteristics

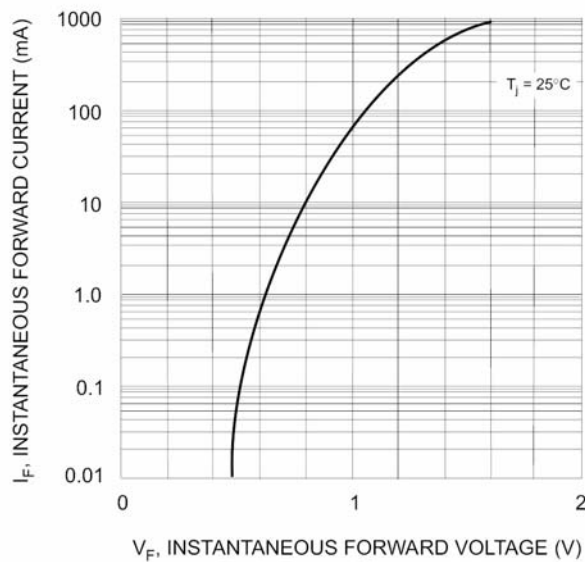


Fig. 1 Forward Characteristics

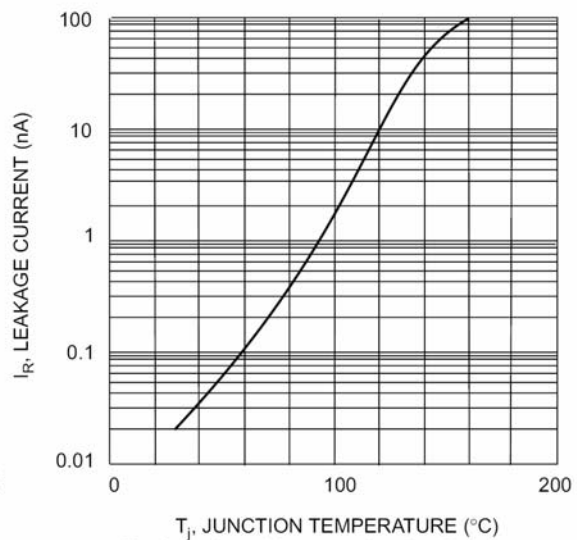


Fig. 2 Leakage Current vs Junction Temperature