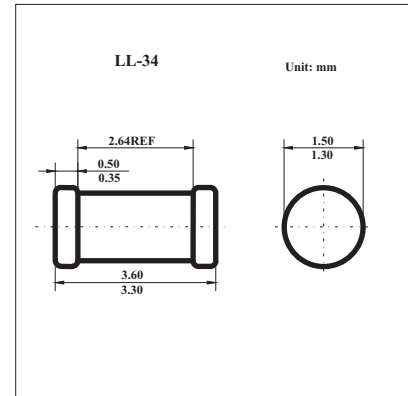


## Surface Mount Switching Diode

### 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	VRRM	250	V
Working Peak Reverse Voltage	VRWM	200	V
DC Blocking Voltage	VR	200	V
RMS Reverse Voltage	VR(RMS)	141	V
Average Rectified Output Current *1	Io	125	mA
Forward Continuous Current *1	IFM	250	mA
Non-Repetitive Peak Forward Surge Current @ $t < 1.0\text{s}$	IFSM	1	A
Power Dissipation	PD	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	Testconditions	Min	Typ	Max	Unit
Maximum Forward Voltage	V <sub>FM</sub>	I <sub>F</sub> = 100mA			1	V
Maximum Peak Reverse Current @ Rated DC Blocking Voltage	I <sub>RM</sub>	T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C			100 15	nA μA
Junction Capacitance	C <sub>j</sub>	V <sub>R</sub> = 0, f = 1.0MHz			1.5	pF
Reverse Recovery Time	t <sub>rr</sub>	I <sub>F</sub> = I <sub>R</sub> = 30mA, I <sub>rr</sub> = 0.1 x I <sub>R</sub> , R <sub>L</sub> = 100 Ω			50	ns

#### ■ Ordering Information

Device	Packaging	Shipping
BAV103	LL34	2500/Tape & Reel

# BAV103

■ TypIacl Characteristics

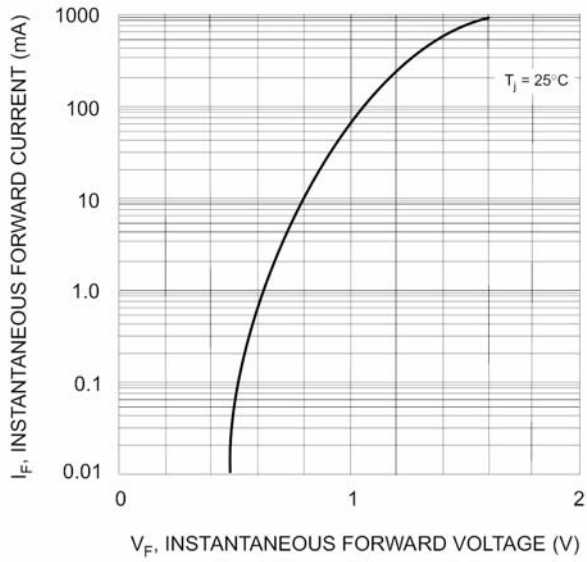


Fig. 1 Forward Characteristics

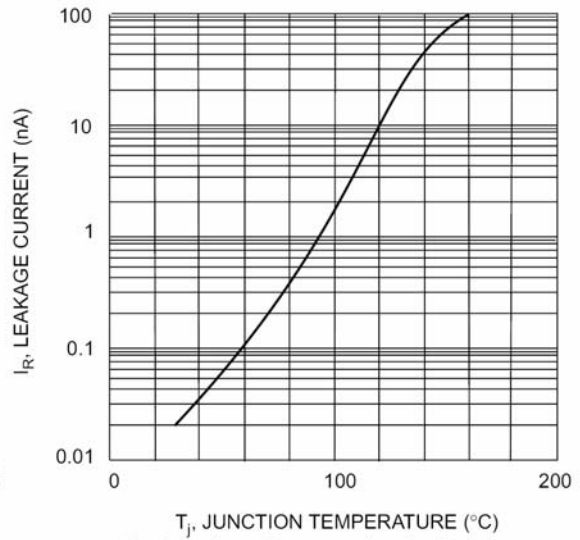


Fig. 2 Leakage Current vs Junction Temperature