

SEMICONDUCTOR TM

General Description:

A General Purpose diode that couples high forward conductance fast switching speed and high blocking voltages in a glass leadless LL-34 Surface Mount package.

Placement of the Expansion Gap has no relationship to the location of the Cathode Terminal which is indicated by the first color band.

High Voltage, General Purpose Diode

Absolute Maximum Ratings* TA = 25°C unless otherwise noted

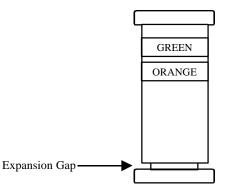
Sym	Parameter	Value	Units
T _{stg}	Storage Temperature	-65 to +200	°C
TJ	Operating Junction Temperature	-65 to +200	OO
P _D	Total Power Dissipation at $T_A = 25^{\circ}C$	500	mW
	Linear Derating Factor from $T_A = 25^{\circ}C$	3.33	mW/ ^o C
R _{OJA}	Thermal Resistance Junction-to-Ambient	350	°C/W
W _{iv}	Working Inverse Voltage	200	V
Ι _ο	Average Rectified Current	200	mA
I _F	DC Forward Current (IF)	500	mA
i _f	Recurrent Peak Forward Current	600	mA
i _{F(surge)}	Peak Forward Surge Current (IFSM) Pulse Width = 1.0 second	1.0	Amp
	Pulse Width = 1.0 microsecond	4.0	Amp

BAV103

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

Electrical Characteristics TA = 25^oC unless otherwise noted

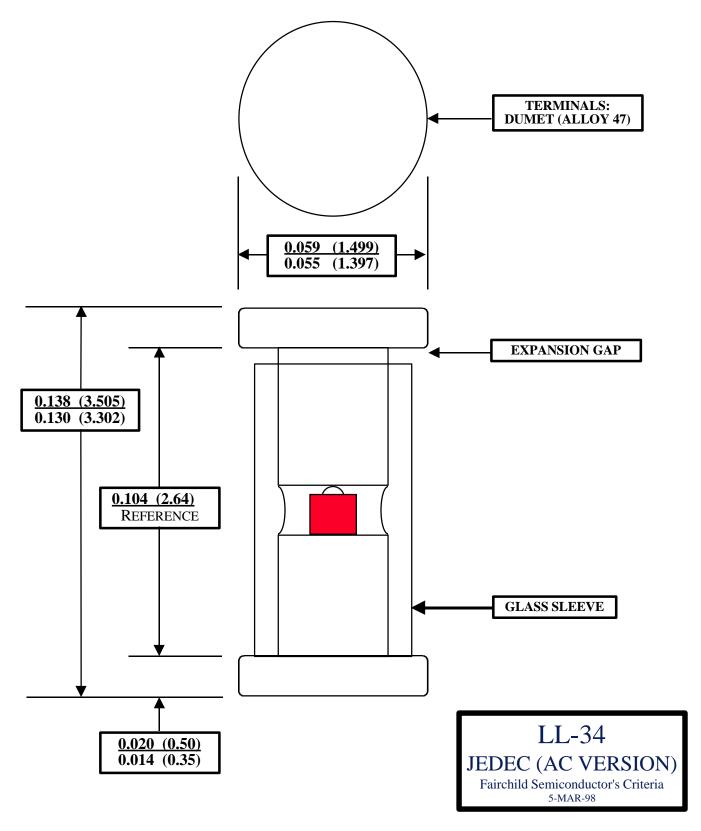
SYM	CHARACTERISTICS	MIN	МАХ	UNITS	TEST CONDITIONS
B_{V}	Breakdown Voltage	250		V	I _R = 100 uA
I _R	Reverse Leakage		100 100	nA uA	$V_{R} = 200 V$ $V_{R} = 200 V T_{A} = 150^{\circ}C$
V_{F}	Forward Voltage		1.00 1.25	V V	I _F = 100 mA I _F = 200 mA
C _T	Capacitance		5.0	pF	$V_{R} = 0.0 V, f = 1.0 MHz$
T _{RR}	Reverse Recovery Time		50	ns	$I_F = I_R 30 \text{ mA} I_{RR} = 1.0 \text{ mA}$ $R_L = 100 \text{ Ohms}$



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THE PLACEMENT OF THE EXPANSION GAP HAS NO RELATIONSHIP TO THE LOCATION OF THE CATHODE TERMINAL OF THE DEVICE. THE EXPANSION GAP & CATHODE BAND CAN BE ON THE SAME TERMINAL OR AT OPPOSITE TERMINALS OF THE DIODE.



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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.
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