

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

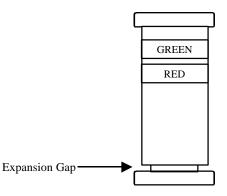
Sym	Parameter	Value	Units
T <sub>stg</sub>	Storage Temperature	-65 to +200	°C
TJ	Operating Junction Temperature	-65 to +200	°C
P <sub>D</sub>	Total Power Dissipation at $T_A = 25^{\circ}C$	500	mW
	Linear Derating Factor from $T_A = 25^{\circ}C$	3.33	mW/ <sup>o</sup> C
R <sub>OJA</sub>	Thermal Resistance Junction-to-Ambient	350	°C/W
W <sub>iv</sub>	Working Inverse Voltage	150	V
Ι <sub>ο</sub>	Average Rectified Current	200	mA
I <sub>F</sub>	DC Forward Current (IF)	500	mA
i <sub>f</sub>	Recurrent Peak Forward Current	600	mA
i <sub>F(surge)</sub>	Peak Forward Surge Current (IFSM) Pulse Width = 1.0 second	1.0	Amp
	Pulse Width = 1.0 microsecond	4.0	Amp

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

# **Electrical Characteristics** TA = 25<sup>o</sup>C unless otherwise noted

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

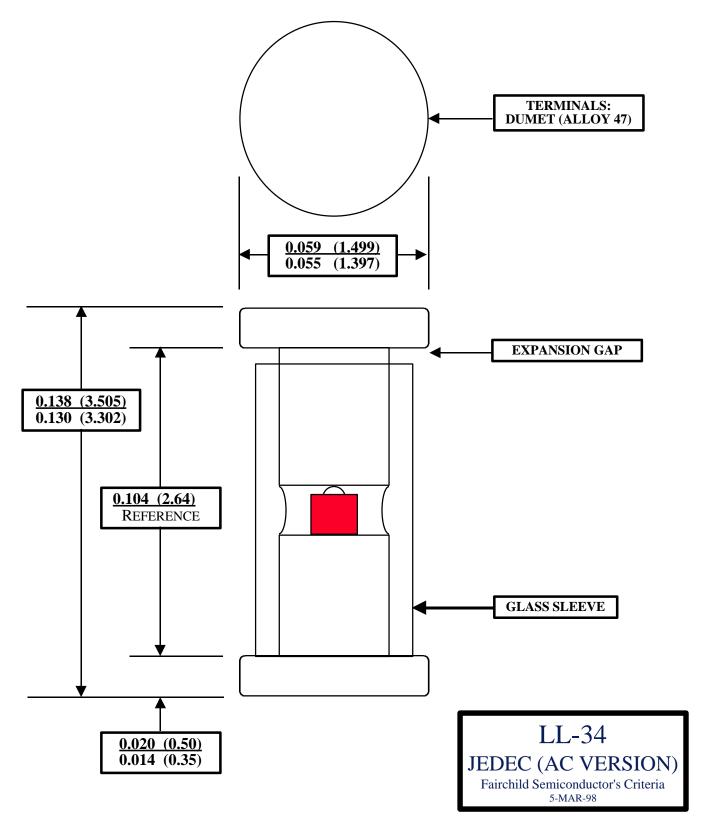
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**BAV102** 



## 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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Definition of Terms

Datasheet Identification	Product Status	Definition
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