



DESCRIPTION

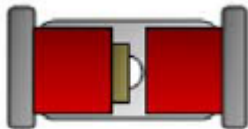
The LLDB3 is available in LL-34 package

ORDERING INFORMATION

Package Type	Part Number
LL-34	LLDB3
Note	SPQ: 2,500pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION

Small Signal Diode



FEATURES

- Surface device type mounting.
- Hermetically Sealed Glass.
- Matte Tin (Sn) Terminal Finish
- All external surfaces are corrosion resistant and terminals are readily solderable.
- Available in LL-34 package

MECHANICAL DATA

Case: MINI-MELF Package

Terminal: Pure tin plated, lead free. solderable per

MIL-STD-202, Method 208 guaranteed

High temperature soldering guaranteed: 260°C /10s

Weight :29 ± 2.5 mg



ABSOLUTE MAXIMUM RATINGS

Rating at 25°C ambient temperature unless otherwise specified

P _D , Power Dissipation		150mW
I _{FRM} , Repetitive Peak Forward Current	Pulse Width=20μsec	2A
R _{θJA} , Thermal Resistance (Junction to Ambient) ^{NOTE 1}		400°C/W
T _J , T _{STG} , Junction and Storage Temperature Range		-40°C ~125°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

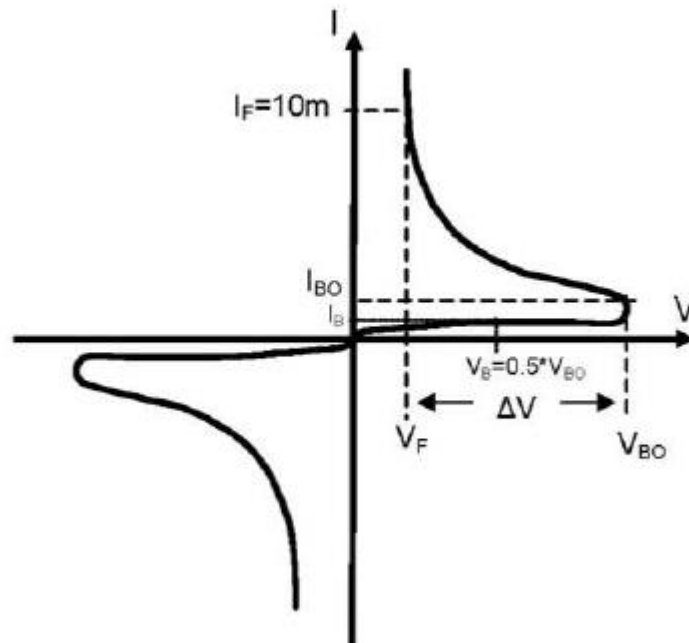
NOTE1: Valid provided that electrodes are kept at ambient temperature

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions		LLDB3	LLDB3TG	Unit
Break-over Voltage	V _{BO}	C= 22nF	Min.	28	30	V
			Typ.	32	32	
			Max.	36	34	
Break-over Voltage Symmetry	+/-V _{BO}	C= 22nF	Max.	+/-3	+/-2	V
Break-over Current	I _{BO}	C= 22nF	Max.	100	15	nA
Dynamic Breakover Voltage	ΔV	I _{BO} to I _F =10mA	Min.	5	9	V
Leakage Current	I _B	V _B = 0.5V _{BO} (MAX)	Max.	10		μA
Output Voltage	V _O	*see diagram 1	Min.	5		V

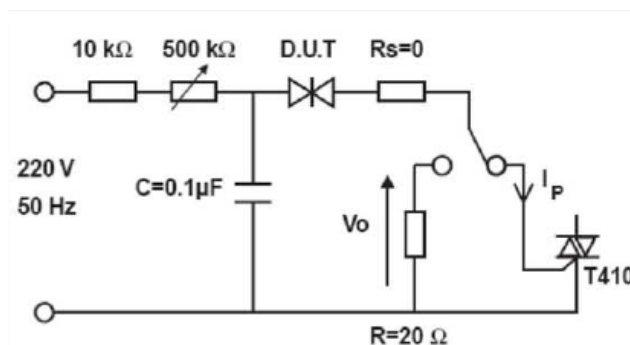


ELECTRICAL PARAMETER



Symbol	Parameter
V_{BO}	Break-Over Voltage
I_{BO}	Break-Over Current
ΔV	Dynamic Breakover Voltage
I_B	Leakage Current at $V_B=0.5*V_{BO}$
V_F	Voltage at Current $I_F=10mA$

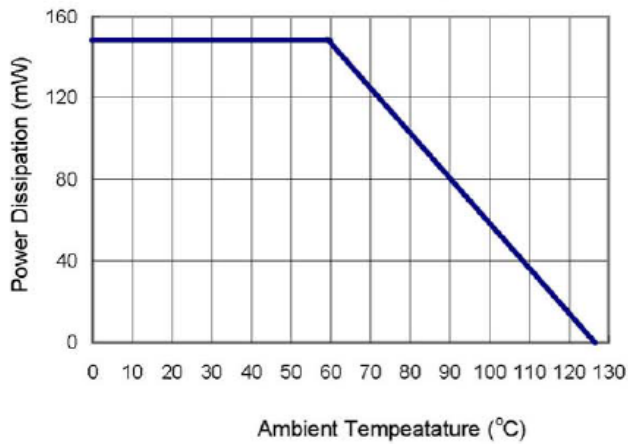
TEST CIRCUIT



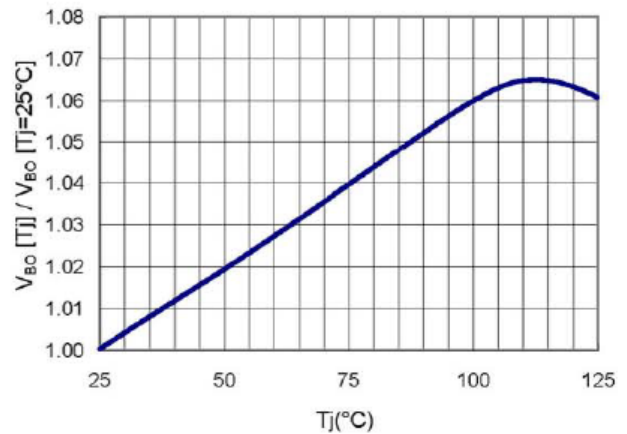


TYPICAL PERFORMANCE CHARACTERISTICS

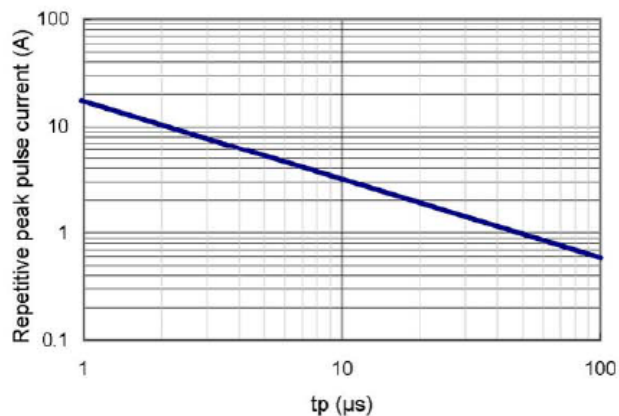
1. Admissible Power Dissipation Curve



2. Relative variation of V_{BO} vs. junction temperature (typical values)



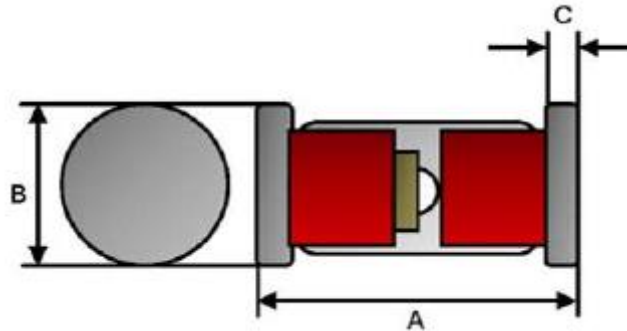
3. Repetitive peak pulse current vs. pulse duration (maximum values)



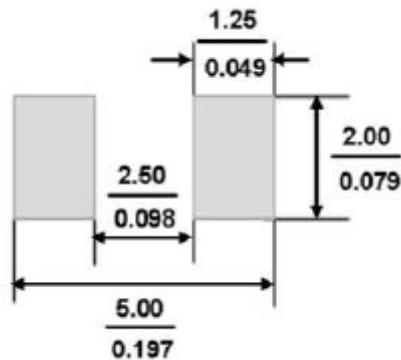


PACKAGE INFORMATION

Dimension in LL-34 (Unit: mm)



Suggested PDA Layout



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	3.300	3.700	0.130	0.146
B	1.400	1.600	0.055	0.063
C	0.200	0.500	0.008	0.020



IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc.'s integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or severe property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.