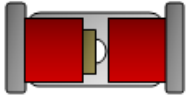
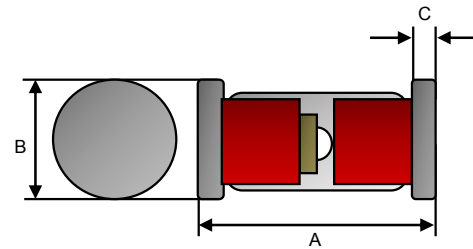


Small Signal Diode



MINI-MELF (LL34) HERMETICALLY SEALED GLASS



Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	3.30	3.70	0.130	0.146
B	1.40	1.60	0.055	0.063
C	0.20	0.50	0.008	0.020

Features

- ✧ Surface device type mounting.
- ✧ Hermetically Sealed Glass.
- ✧ Matte Tin (Sn) Terminal Finish
- ✧ Pb free version and RoHS compliant
- ✧ All external surfaces are corrosion resistant and terminals are readily solderable.

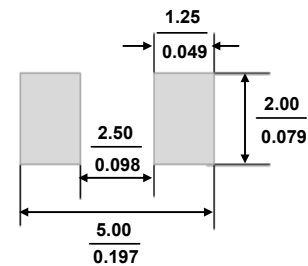
Mechanical Data

- ✧ 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

Ordering Information

Package	Part No.	Packing
MINI-MELF	LLDB3 L1	2.5K / 7" Reel
MINI-MELF	LLDB3TG L1	2.5K / 7" Reel

Suggested PAD Layout



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

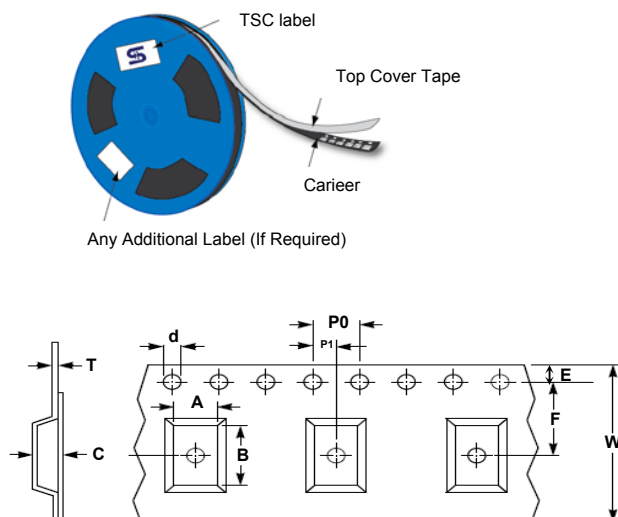
Maximum Ratings

Type Number	Symbol	Value	Units
Power Dissipation	P_D	150	mW
Repetitive Peak Forward Current Pulse Width= 20μsec	I_{FRM}	2	A
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	400	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-40 to + 125	°C

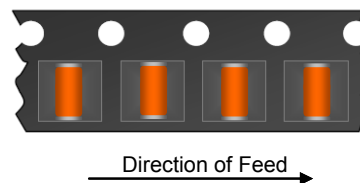
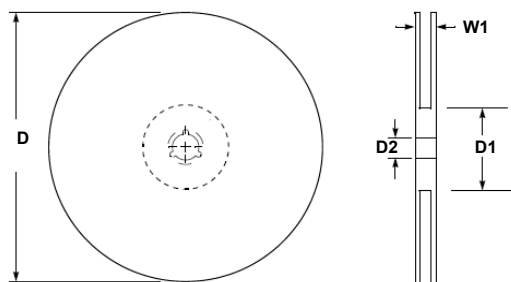
Notes:1. Valid provided that electrodes are kept at ambient temperature

Electrical Characteristics

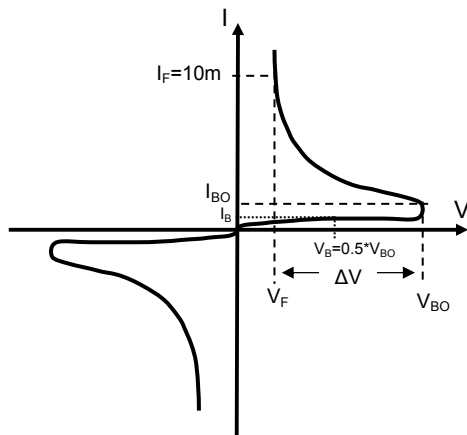
Type Number		Symbol	LLDB3	LLDB3TG	Units
Break-over Voltage	C= 22nF	V_{BO}	Min.	28	V
			Typ.	32	
			Max.	36	
Break-over Voltage Symmetry	C= 22nF	$+/-V_{BO}$	Max.	+ / - 3	V
Break-over Current	C= 22nF	I_{BO}	Max.	100	μA
Dynamic Breakover Voltage	I_{BO} to $I_F=10mA$	ΔV	Min.	5	V
Leakage Current	$V_B = 0.5V_{BO}$ (MAX)	I_B	Max.	10	μA
Output Voltage	*see diagram 1	V_O	Min.	5	V

Tape & Reel specification


Item	Symbol	Dimension
Carrier width	A	1.83 ± 0.10
Carrier length	B	3.73 ± 0.10
Carrier depth	C	1.80 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178 ± 1
Reel inner diameter	D1	55 Min
Feed hole width	D2	13.0 ± 0.20
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.05
Sprocket hole pitch	P0	4.00 ± 0.10
Embossment center	P1	2.00 ± 0.05
Overall tape thickness	T	0.23 ± 0.005
Tape width	W	8.00 ± 0.30
Reel width	W1	14.4max



Rating and Characteristic Curves



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 $I_F=10mA$

Diagram 1: Test Circuit

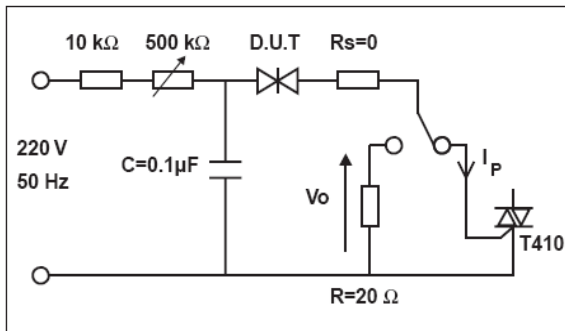


FIG 1 Admissible Power Dissipation Curve

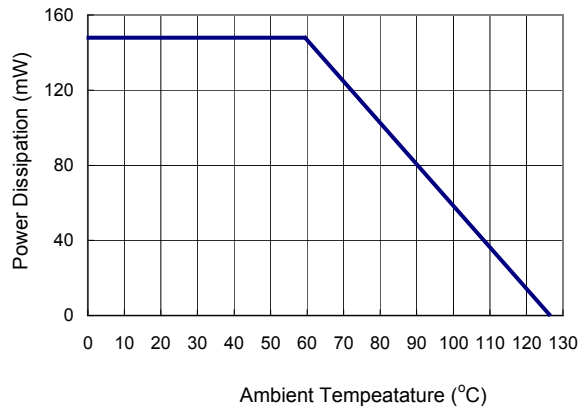


FIG 2 Relative variation of VBO versus junction temperature (typical values)

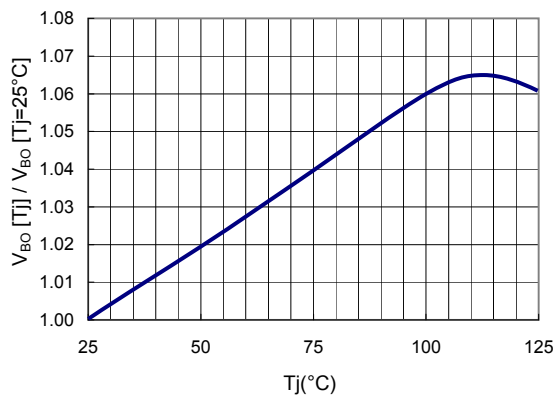


FIG 3 Repetitive peak pulse current versus pulse duration (maximum values)

