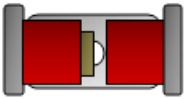
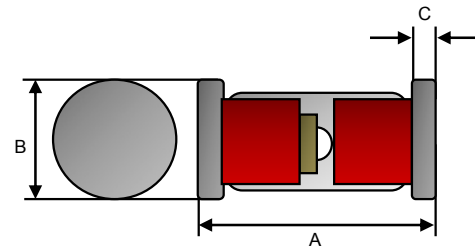


Small Signal Diode



MINI-MELF (LL34) HERMETICALLY SEALED GLASS



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

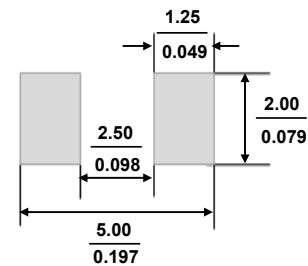
- ✧ Case :MINI-MELF Package
- ✧ Terminal: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ High temperature soldering guaranteed: 260°C/10s
- ✧ Weight : 29 ± 2.5 mg

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

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.

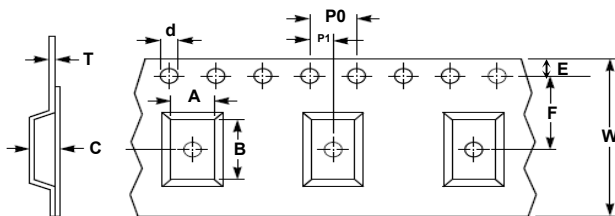
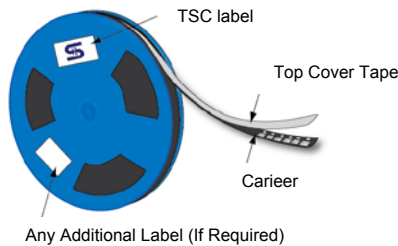
Maximum Ratings

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

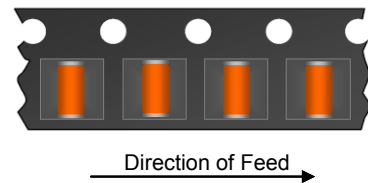
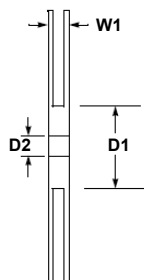
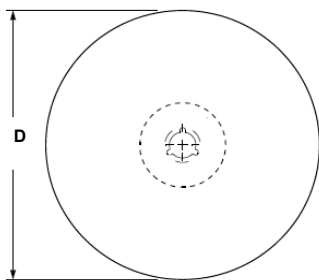
Notes:1. Valid provided that electrodes are kept at ambient temperature

Small Signal Diode
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	+ / - 2	V
Break-over Current	C= 22nF	I_{BO}	Max.	100	15	μA
Dynamic Breakover Voltage	I_{BO} to $I_F=10mA$	ΔV	Min.	5	9	V
Leakage Current	$V_B= 0.5V_{BO}$ (MAX)	I_B	Max.	10		μA
Output Voltage	*see diagram 1	V_O	Min.	5		V

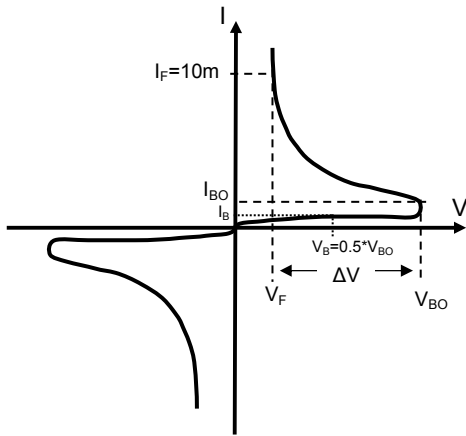
Tape & Reel specification


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



Small Signal Diode

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

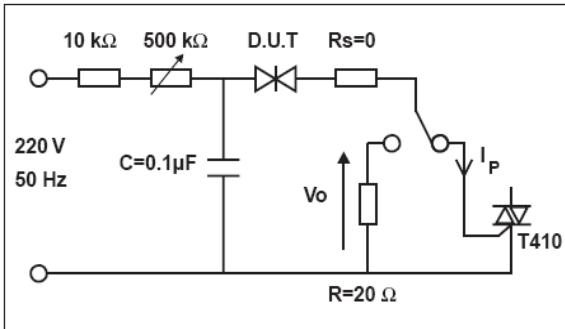


FIG 1 Admissible Power Dissipation Curve

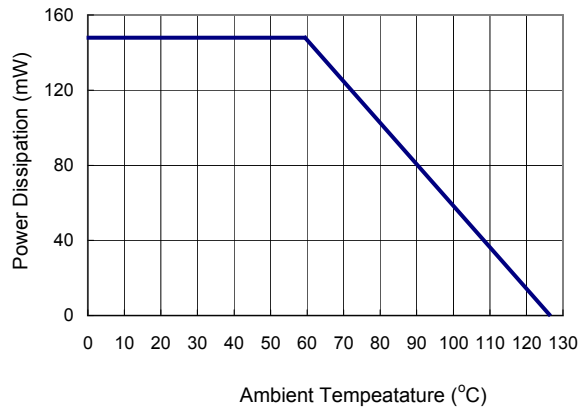


FIG 2 Relative variation of VBO versus junction temperature (typical values)

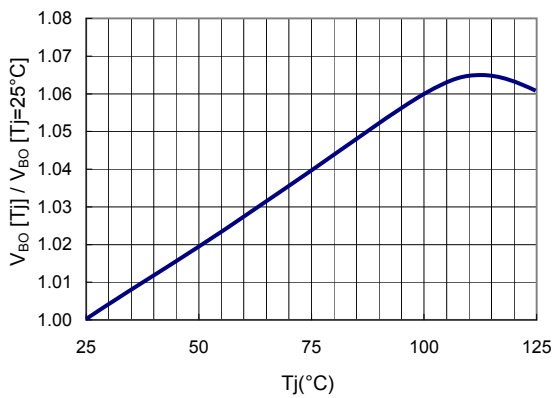


FIG 3 Repetitive peak pulse current versus pulse duration (maximum values)

