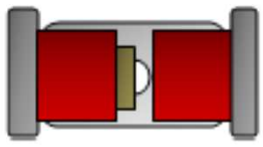
Small Signal Product

150mW Bi-directional Trigger Diode

FEATURES

- Surface mounted device
- Hermetically sealed glass
- Matte Tin(Sn) terminal finish
- All external surfaces are corrosion resistant and terminals are readily solderable



Pb-Free

Mini-MELF (LL34)

Hermetically Sealed Glass

RoHS COMPLIANT

MECHANICAL DATA

- Case: Mini-MELF package
- High temperature soldering guaranteed: 260°C/10s
- Weight: 29 ± 2.5 mg
- Terminal: Pure tin plated, lead free, solderable per MIL-STD-202, method 208 guaranteed
- Pb free and RoHS compliant

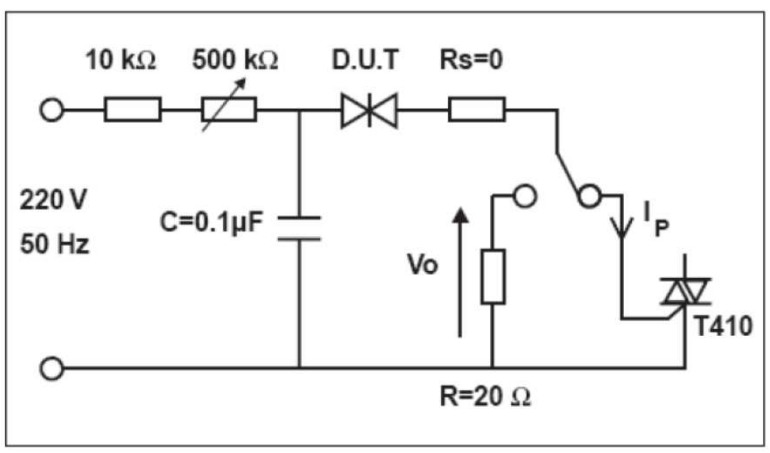
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Repetitive Peak Forward Current	Pulse Width = 20μs	I_{FRM}	2	A
Power Dissipation		P_D	150	mW
Thermal Resistance (Junction to Ambient)	(Note)	$R_{\theta JA}$	400	$^oC/W$
Junction and Storage Temperature Range		T_J, T_{STG}	- 40 to + 125	^oC

Notes: Valid provided that electrodes are kept at ambient temperature

PARAMETER		SYMBOL	MIN	TYP	MAX	TEST CONDITION	UNIT
Break-Over Voltage	LLDB3	V_{BO}	28	32	36	C=22nF	V
	LLDB3TG		30	32	34		
Break-Over Voltage Symmetry	LLDB3	+ / -V_{BO}			±3	C=22nF	V
	LLDB3TG				±2		
Dynamic Breakdown Voltage	LLDB3	△V	5			I_{BO} to I_F=10mA	V
	LLDB3TG		9				
Output Voltage		V_O	5			(Note)	V
Leakage Current		I_B			10	V_B = 0.5V_{BO} (Max)	μA
Break-Over Current	LLDB3	I_{BO}			100	C=22nF	μA
	LLDB3TG		-		15		

Notes: Test Circuit



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RATINGS AND CHARACTERISTICS CURVES

(T_A=25℃ unless otherwise noted)

Fig. 1 Admissible Power Dissipation Curve

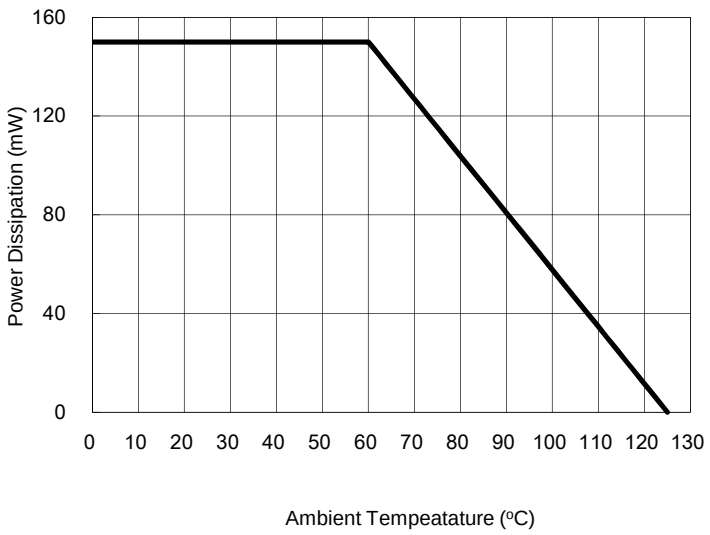


Fig. 2 Relative Variation of VBO VS. Junction Temperature (Typical Values)

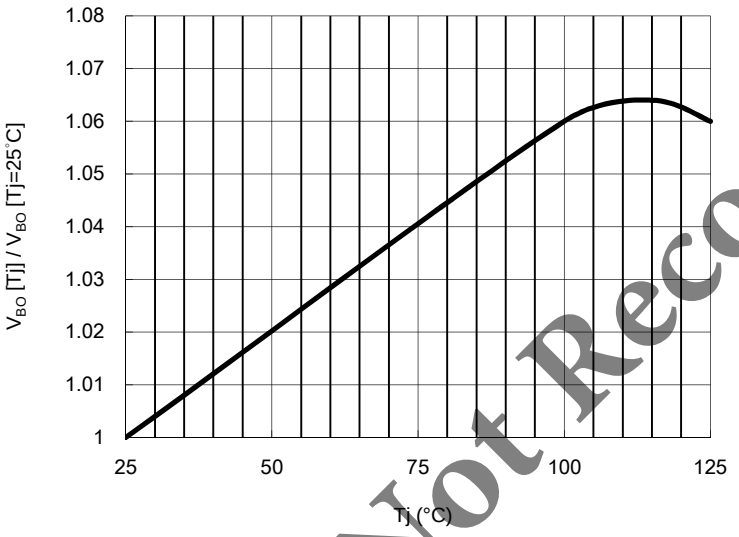
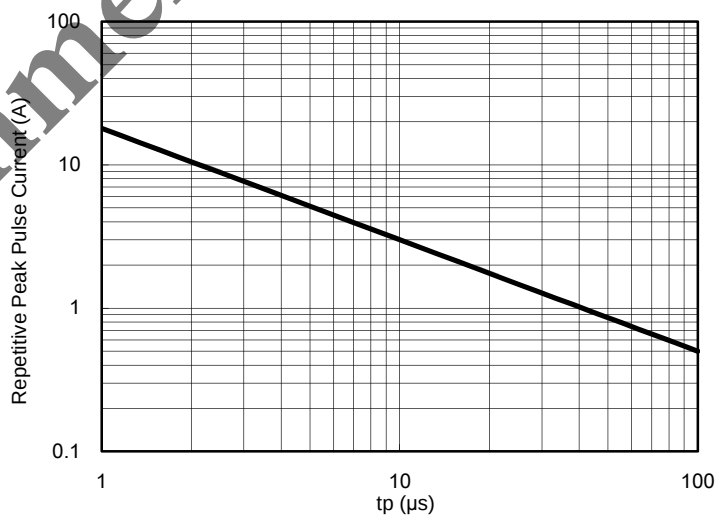
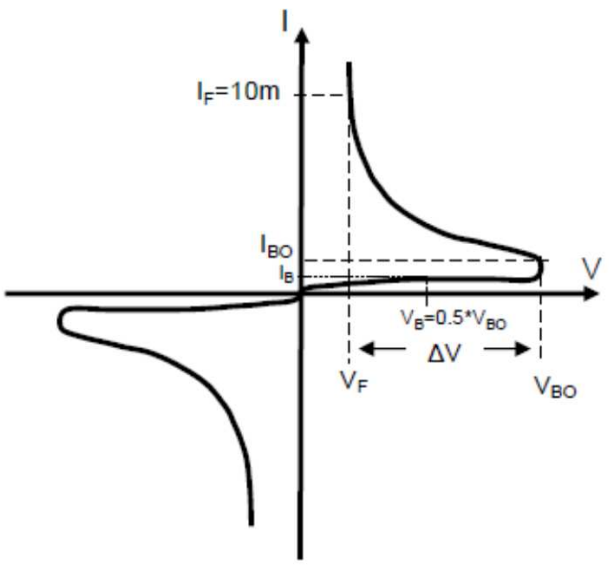


Fig. 3 Repetitive Peak Pulse Current VS. Pulse Duration (Maximum Values)





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

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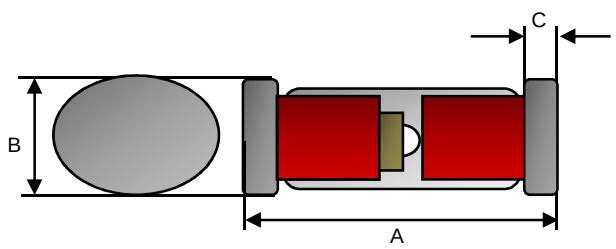
ORDERING INFORMATION						
PART NO.	**MANUFACTURE CODE (Note)**	**PACKING CODE**	**GREEN COMPOUND CODE**	**PACKAGE**	**PACKING**	**MARKING**
LLDB3		L1	G	Mini-MELF (LL34)	2.5K / 7" Reel	
LLDB3TG		L1	G	Mini-MELF (LL34)	2.5K / 7" Reel	

Note: Indicator of manufacturing site for manufacture special control, if empty means no special control requirement

EXAMPLE					
PREFERRED P/N	**PART NO.**	**MANUFACTURE CODE**	**PACKING CODE**	**GREEN COMPOUND CODE**	**DESCRIPTION**
LLDB3 L1G	LLDB3		L1	G	Green compound
LLDB3-N0 L1G	LLDB3	N0	L1	G	Green compound

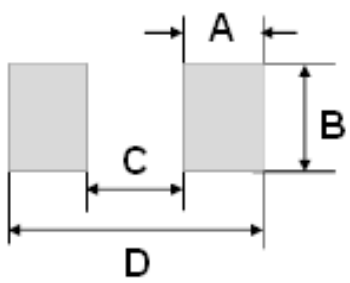
PACKAGE OUTLINE DIMENSIONS

Mini-MELF (LL34)



DIM.	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

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
A	1.25	0.049
B	2.00	0.079
C	2.50	0.098
D	5.00	0.197

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