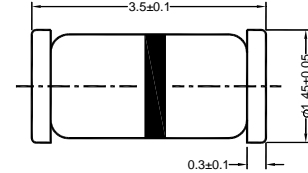


**Silicon Bidirectional Trigger Diodes**

These diacs are intended for use in thyristor phase control, circuits for lamp-dimming, universal-motor speed controls, and heat controls.

LL-34



Glass Case Mini MELF  
Dimensions in mm

**Absolute Maximum Ratings (T<sub>a</sub> = 25 °C)**

Parameter	Symbol	Value	Unit
Power Dissipation (T <sub>a</sub> = 65 °C)	P <sub>tot</sub>	150	mW
Repetitive Peak On-state Current (tp = 20 μs, f = 100 Hz)	I <sub>TRM</sub>	2	A
Operating Junction and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	- 40 to + 125	°C

**Characteristics at T<sub>a</sub> = 25 °C**

Parameter	Symbol	Min.	Max.	Unit
Breakover Voltage at C = 22 nF, see diagram 1	LLDB3	28	36	V
	LLDB4	35	45	
Breakover Voltage Symmetry at C = 22 nF, see diagram 1	[ +V <sub>BO</sub>  - -V <sub>BO</sub>  ]	-	3	V
Dynamic Breakover Voltage at ΔI = [I <sub>BO</sub> to I <sub>F</sub> = 10 mA]	ΔV ±	5	-	V
Output Voltage See diagram 2	V <sub>O</sub>	5	-	V
Breakover Current at C = 22 nF	I <sub>BO</sub>	-	50	μA
Leakage Current at V <sub>B</sub> = 0.5 V <sub>BO</sub> max	I <sub>B</sub>	-	10	μA
Rise Time See diagram 3	t <sub>r</sub>	-	2	μs

Diagram 1: Current-voltage characteristics

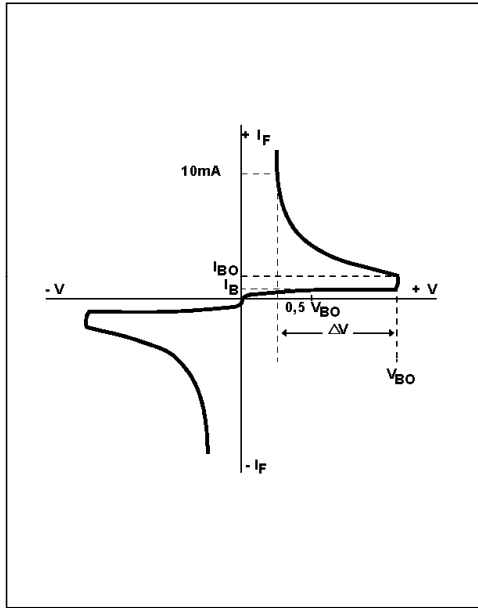


Fig. 1: Power dissipation versus ambient temperature (maximum values)

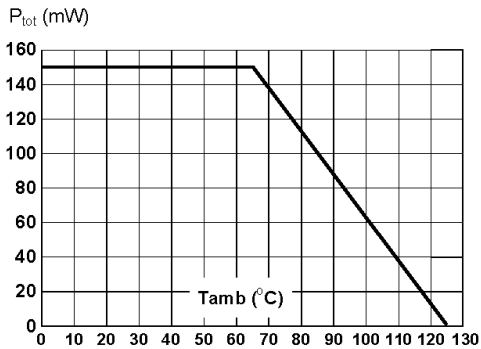


Fig. 3: Peak pulse current versus pulse duration (maximum values)

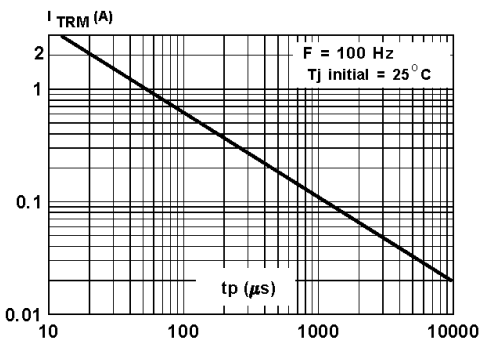


Diagram 2: Test circuit for output voltage

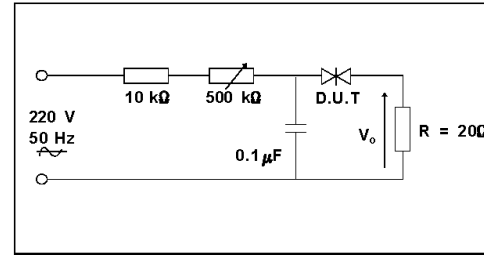


Diagram 3: Test circuit see diagram 2. Adjust R for  $I_p=0.5A$

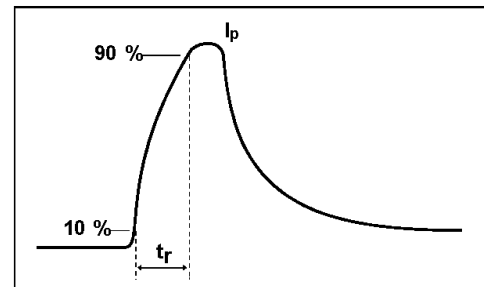


Fig. 2: Relative variation of  $V_{BO}$  versus junction temperature (typical values)

