



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

DLDB3
THRU
DLDB4

TECHNICAL SPECIFICATIONS OF BIDIRECTIONAL DIODE THYRISTORS (DIACS)

FEATURES

- * Glass passivated three-layer for triggering thyristors.
- * Low breakover current at breakover voltage.
- * For use in thyristor phase-control circuit for lampdimming, universal-motor speed control and heat controls.

MECHANICAL DATA

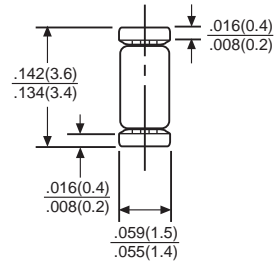
- * Case: Glass case Minimelf DL-35
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Mounting position: Any
- * Weight: 0.05 gram Approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



Mini Melf(DL-35)



Dimensions in inches and (millimeters)

PARAMETERS	SYMBOL	DLDB3	DLDB4	UNITS
Breakover Voltage	+V _{BO} , -V _{BO}	28	35	Volts Min
		32	40	Typ
		36	45	Max
Breakover Voltage Symmetry	(+V _{BO})-(-V _{BO})	3	3	Volts Max
Dynamic Breakback Voltage	V _{BO} - V _{BR}	5	5	Volts Min
Breakover Current	+I _{BO} , -I _{BO}	100	100	μAmps Max
Repetitive Peak On-State Current for 10μS, f=100Hz	I _{TRM}	2.0	2.0	Amps Max

RATING AND CHARACTERISTIC CURVES (DLDB3 THRU DLDB4)

FIG.1 - VOLTAGE-CURRENT CHARACTERISTICS

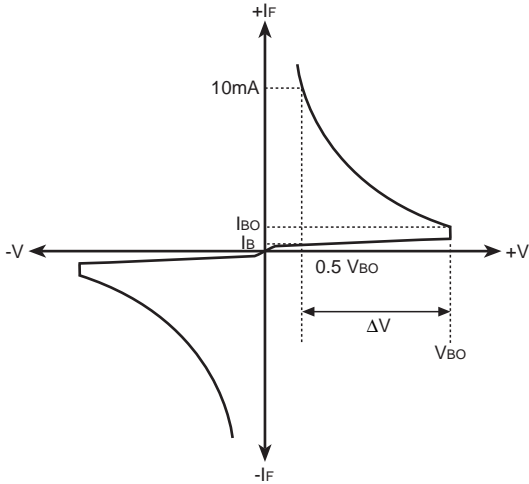


FIG.2 - TEST CIRCUIT FOR OUTPUT VOLTAGE

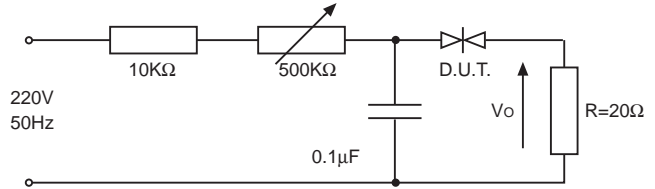


FIG.3 - TEST CIRCUIT SEE FIG.2 ADJUST R FOR $I_P=0.5\text{A}$

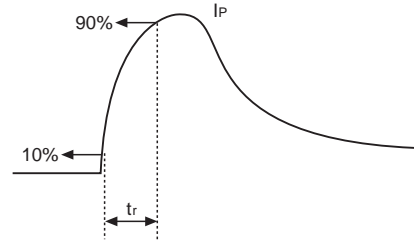
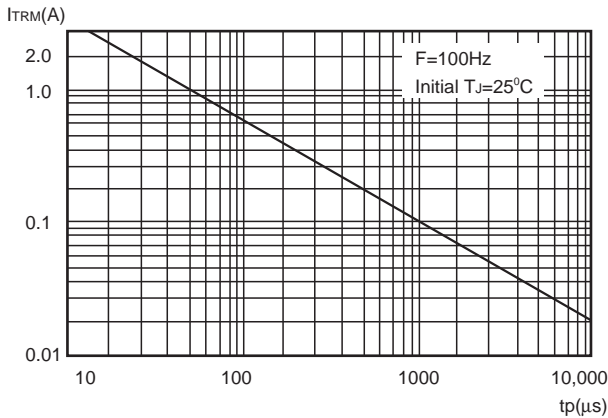
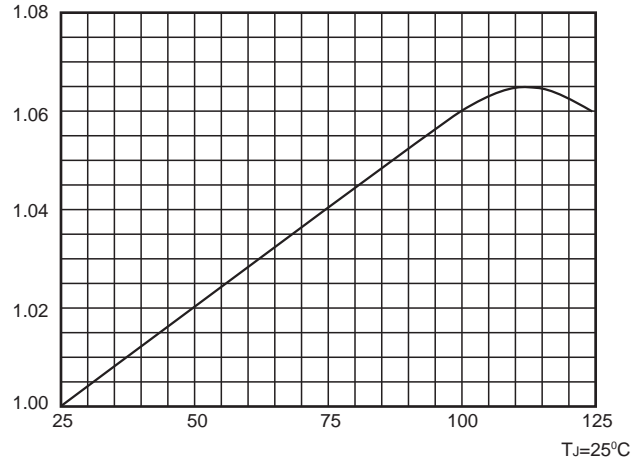


FIG.4 - REPETITIVE PEAK ON-STATE CURRENT VS PULSE DURATION



$\frac{V_{BO}(T_J)}{V_{BO}(T_J=25^\circ\text{C})}$

FIG.5 - NORMALIZED V_{BO} CHANGE VS JUNCTION TEMPERATURE



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