

# LLDB3, LLDB4

The glass passivated, three-layer, two terminal, axial lead, hermetically sealed diacs are designed specifically for triggering thyristors. They demonstrate low breakover current at breakover voltage as they withstand peak pulse current. The breakover symmetry is within four volts with a typical breakover voltage of LLDB3 32 V, LLDB 40 V. These diacs are intended for use in thyristor phase control, circuits for lamp-dimming, universal-motor speed controls, and heat controls.

### FEATURES :

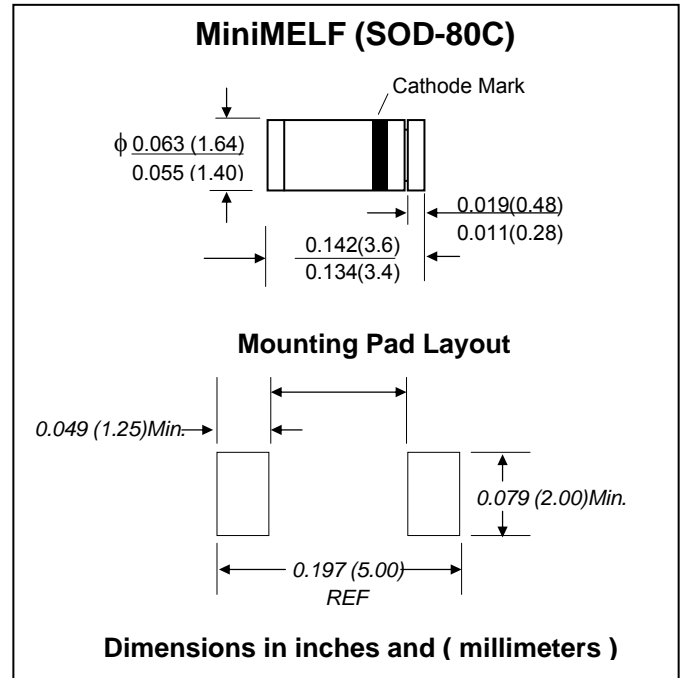
- \*  $V_{BR}$  : 32 V and 40 V
- \* Low breakover current
- \* Pb / RoHS Free

### MECHANICAL DATA :

Case: MiniMELF Glass Case (SOD-80)

Weight: approx. 0.05g

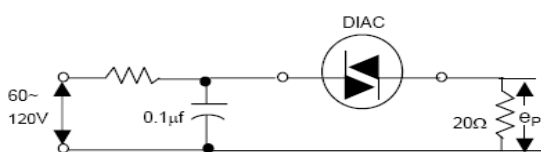
## SILICON BI-DIRECTIONAL DIACS



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

RATING	SYMBOL	LLDB3	LLDB4	UNIT
Minimum Breakover Voltage	$V_{BR1}$ and $V_{BR2}$ (Min.)	28	35	V
Typical Breakover Voltage	$V_{BR1}$ and $V_{BR2}$ (Typ.)	32	40	V
Maximum Breakover Voltage	$V_{BR1}$ and $V_{BR2}$ (Max.)	36	45	V
Maximum Breakover Current	$I_{(BR)1}$ and $I_{(BR)2}$	200		$\mu$ A
Maximum Breakover Voltage Symmetry	$[V_{(BR)1}] - [V_{(BR)2}]$	3.8		V
Minimum Dynamic Breakback Voltage $\Delta I = [I_{BR}$ to $I_F = 10$ mA]	$ \Delta V \pm $	5.0		V
Maximum Peak Current at Ta = 50 °C (10 $\mu$ s duration, 120 cycle repetition rate)	$I_P$	$\pm 2$		A
Maximum Peak output Voltage at Ta = 50 °C **	$e_P$	$\pm 3$		V
Thermal Impedance Junction to Ambient	$R_{\theta JA}$	60		°C/W
Operating Junction Temperature Range	$T_J$	- 40 to + 100		°C
Storage Temperature Range	$T_{STG}$	- 40 to + 150		°C

\*\*CIRCUIT FOR PEAK OUTPUT VOLTAGE TEST



Characteristics at  $T_{amb} = 25^\circ C$

TYPICAL DIAC-TRIAC FULL-WAVE PHASE CONTROL CIRCUIT

