

EL Lamp Driver Demoboard

General Description

The Supertex HV859DB1 demoboard contains all the necessary circuitry needed to demonstrate the features of the HV859 EL lamp driver.

Simply connect it to a power supply and an EL lamp. For additional assistance in designing EL driver circuits, please refer to application notes **AN-H33 (the effect of external components on performance of Supertex EL drivers)** and **AN-H43 (EL lamp driver circuits to reduce audible lamp noise)**.

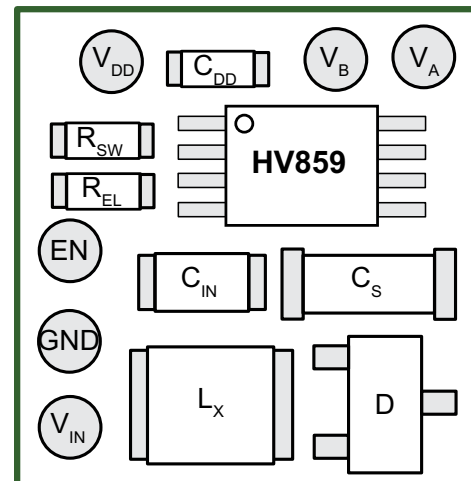
Specifications

Parameter	Value
Input voltage:	1.8 to 5.0V
Typical supply current:	25mA
Lamp size range:	up to 5.0in ²
Lamp frequency:	204Hz
Converter frequency:	80kHz

Board Layout and Connection Diagram



Actual Dimensions = 12mm x 12mm



Connections:

EN - Enable Input

Enables/Disables the lamp driver. A logic high (connect to VDD) enables the driver, and a logic low (connect to GND), disables the driver. This input can be connected to a mechanical switch, or to a logic circuit output that has a source impedance of less than 20k Ω .

VDD - IC Supply

Supplies the HV859 EL driver IC. The supplied circuit is optimized for 3.0V operation. The operating range can be from 1.8V to 5.0V. Connect to the positive terminal of a power supply.

Note:

Make sure all the above connections are made before powering up the supply voltages.

VIN - Inductor Supply

Supplies the high voltage power converter. Connect to the positive terminal of a power supply.

GND - Circuit Ground

Connect to the VDD and VIN negative terminals. Supply bypass capacitors for both VDD and VIN are provided on the demo board. External supply bypass capacitors are not required.

VA and VB - Lamp Connections

Connect to an EL lamp. Polarity is irrelevant.

