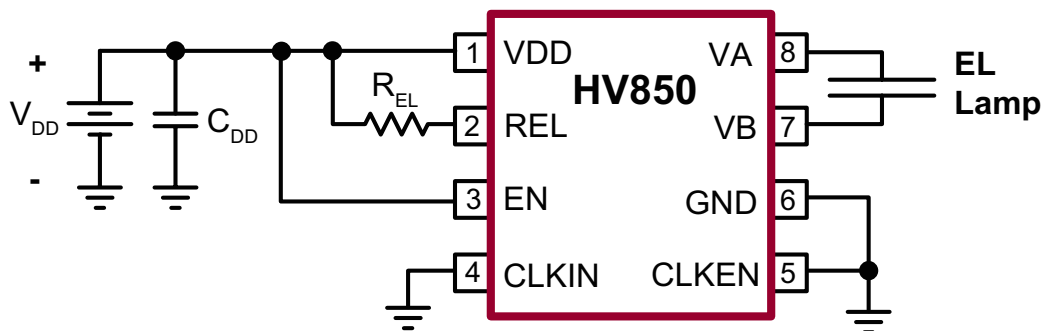


## Product Summary Sheet

### High Voltage, Low Noise, Inductorless EL Lamp Driver IC

#### Applications:

- ▶ Cell phone keypads and displays
- ▶ Transceivers
- ▶ MP3 Players
- ▶ Watches
- ▶ Measuring instruments and gauges



Typical Application Circuit

#### Product Overview:

The Supertex HV850 is a high voltage electroluminescent (EL) Lamp Driver IC. This high voltage driver is designed to drive EL lamps with up to 4.5nF loads, which are equivalent to approximately 2.0 square inches. HV850 converts a low voltage DC input (3 - 4.2V) to a high voltage AC (140VAC) output across an EL lamp. It uses a charge pump scheme to increase the input voltage that eliminates the need for an external inductor, and sometimes also an external diode and high voltage capacitor commonly found in conventional topologies.

The charge pump circuit discharges its energy into an EL lamp through a high voltage H-bridge. Once the voltage reaches its regulated limit, it is turned off to conserve power. The EL lamp is then discharged to ground and the H-bridge changes state to allow the charge pump to charge the EL lamp in the opposite direction.

Features:	Benefits:
Patented inductorless EL lamp driver.	Low cost, small circuit, low profile/height.
Requires only one or NO external components.	Saves space.
150nA shutdown current.	Minimum usage of the battery while the lamp is in stand by mode.
Turn off delay time capability.	Suitable for applications that require momentary enable function.
Output voltage regulation.	Provides uniform brightness over input voltage range. Saves power, extends battery life.
Adjustable EL excitation frequency.	Simple adjustment of lamp brightness and hue.
Slow rising output waveform.	Minimizes lamp audible noise.
Enable function.	Ease of control from microprocessor or other logic circuitry.
No SCR output.	Allows use of elastomeric connectors. Ease of assembly.



8-Lead MSOP (MG)



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**Supertex inc.**

## High Voltage, Low Noise, Inductorless EL Lamp Driver IC

### Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
HV850MG-G	8-Lead MSOP	Now	4-6 Weeks

-G indicates the part is RoHS compliant (Green).



### Product Contact

For any questions regarding the HV845, please contact your local area Supertex sales office, or contact the main office in the US at:

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