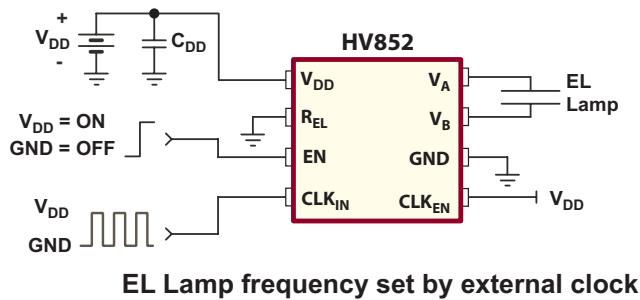
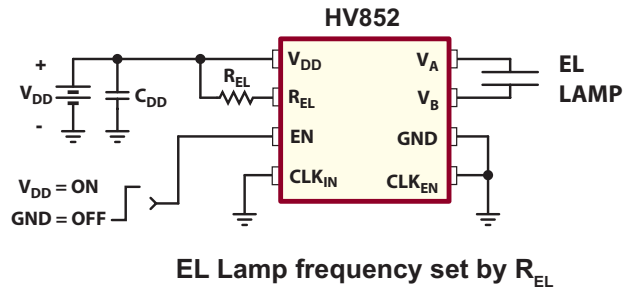


# Product Summary Sheet

# HV852

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

### Typical Application Circuits



### Applications:

- ▶ Cellular phone keypads
- ▶ Watches
- ▶ PDAs
- ▶ Small handheld wireless devices
- ▶ MP3 Players



MSOP-8 (MG)



DFN-10 (K7)

### Product Overview:

The Supertex HV852 is a high voltage EL (electroluminescent) lamp driver. It is designed to drive EL lamps of up to 1.5in<sup>2</sup>, with capacitive values up to 5.3nF. The HV852 converts a low voltage DC input to a high voltage AC output across an EL lamp. It uses a charge pump scheme to boost the input voltage eliminating the need for an external inductor, 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.

The EL lamp frequency can be set either by an external resistor  $R_{EL}$  or by applying an external clock where the clock frequency is divided by 128 to set the EL lamp frequency.

Features:	Benefits:
Patented inductorless EL Lamp Driver	Low cost, small circuit, low profile/height
Requires minimal external components	Saves space
Low Noise	Ideal for use in noise-sensitive applications, i.e., cell phones
160V peak-to-peak output voltage	Higher lamp brightness
Output Voltage Regulation	Uniform brightness over input voltage range
Wide input voltage range of 2.4V to 5.0V	Ease of design with commonly available supply voltages in watches and cell phones
Enable function	Ease of control from microprocessor or other logic circuitry
Adjustable EL Excitation Frequency	Simple adjustment of lamp brightness and hue



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**Supertex inc.**

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

### Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Lead Time</u>
HV852MG-G	8-Lead MSOP (Green)	Now	4-5 Weeks
HV852K7-G	10-Lead DFN (Green)		

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



### Product Contact

For any questions regarding the HV852 please contact your local area Supertex sales office, or contact the main office in the US at:

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Website: [www.supertex.com](http://www.supertex.com)