

Product Summary Sheet

Applications:

- ▶ Decorative Lighting
- ▶ Low Power Light Fixtures
- ▶ LED Signs and Displays
- ▶ Architectural Lighting
- ▶ Incandescent Replacements
- ▶ Industrial Lighting



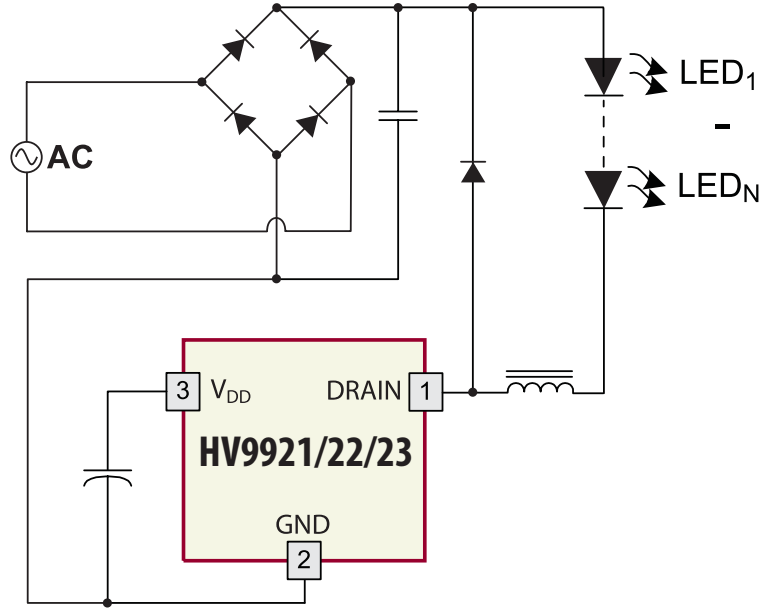
SOIC (LG)



SOIC (NG)

HV9921/HV9922/HV9923

3-Pin Switch-Mode LED Lamp Driver ICs



Typical Application Circuit

Product Overview:

The HV9921/22/23 are pulse width modulated (PWM) LED driver control ICs. They allow efficient operation of low current LED strings from voltage sources ranging up to 400VDC. The HV9921/22/23 include an internal high-voltage switching MOSFET controlled with fixed off-time T_{OFF} of approximately 10ms, which allow driving of LED voltage strings of up to 80% of the input voltage. The LED string is driven at constant current, providing constant light output and enhanced reliability. The output current is internally fixed at 20mA for HV9921, 150mA for the HV9922, and 30mA for HV9923. The peak current control scheme of the HV9921/22/23 provides good LED current regulation throughout the universal AC input voltage range of 85 to 264 VAC or DC input voltage of 20 to 400V.

Features:	Benefits:
Internal MOSFET	Low external part count
3 Pins, TO-92 or SOT-89	Low cost and small board area
DC Input range: 20VDC to 400VDC	Universal Off-line applications of 80VAC – 264VAC, or low voltage architectural lighting.
Fixed Off-Time Control	No compensation circuit needed. Simple control of buck converter. String LEDs up to 80% of input voltage
500V Breakdown Voltage	Meet input transient requirements such as EN61000



HV9921/HV9922/HV9923

3-Pin Switch Mode LED Driver

Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Lead Time</u>
HV9921N3-G	3 Pin TO-92 (Green)	Now	4-5 Weeks
HV9921N8-G	3 Pin SOT-89 (Green)		
HV9922N3-G	3 Pin TO-92 (Green)		
HV9922N8-G	3 Pin SOT-89 (Green)		
HV9923N3-G	3 Pin TO-92 (Green)		
HV9922N8-G	3 Pin SOT-89 (Green)		



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

Demo Boards Available - **NOW**

<u>Part Number</u>	<u>V_{IN}</u>	<u>V_{LED}(max)/I_{out}</u>	<u>Availability</u>
HV9921DB1	85VAC - 264VAC	50V / 20mA	Now
HV9922DB1	85VAC - 264VAC	50V / 50mA	Now
HV9923DB1	85VAC - 264VAC	50V / 30mA	Now

Product Contact

For any questions regarding the HV9921, HV9922, or the HV9923, please contact your local area Supertex sales office, or contact the main office in the US at:

Telephone: 800-222-9883
 Fax: 408-222-4895
 EMail: mktg@supertex.com
 Website: www.supertex.com

Supertex inc.
 1235 Bordeaux Drive, Sunnyvale, CA 94089