

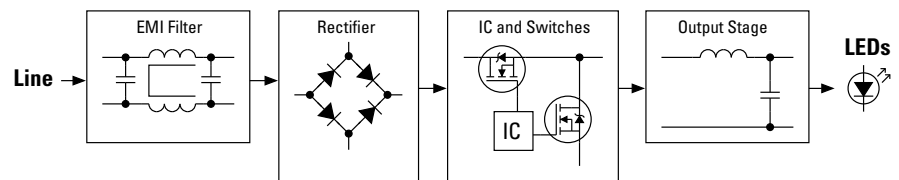
## High-Voltage Buck Control ICs for Constant LED Current Regulation

### Features:

- Micropower Startup (less than 500 $\mu$ A)
- $\pm 2\%$  voltage reference
- 140ns deadtime
- PWM Dimmable
- Free running frequency
- 200V (IRS25401) and 600V (IRS25411) Half-Bridge Driver IC
- 15.6V Zener clamp on VCC
- Frequency up to 500kHz
- Auto restart, non latched shutdown
- Small DIP8/SO8 package

### Benefits:

- Micro power startup
- Precise current regulation
- Continuous current regulation
- Great adaptability



The IRS254(01/11) series is comprised of high-voltage, high-frequency buck regulator control ICs for AC-DC offline, non-isolated applications requiring multiple light emitting diode (LED) circuits or requiring DC-DC color-mixing capabilities. Applications include indoor and outdoor signage as well as architectural, entertainment, design and decorative lighting. Rated at 200V or 600V, the IRS254(01/11) series incorporates a continuous mode, time-delayed hysteretic buck regulator to control the average load current within a tolerance of five percent, using an accurate on-chip band gap voltage reference. An external high-side bootstrap circuit drives the buck switching element at high frequencies up to 500kHz. A low-side driver is also provided for synchronous rectifier designs.

# High-Voltage Buck Control ICs for Constant LED Current Regulation

Part Number	Package	Specifications
IRS25401PbF	DIP8	<ul style="list-style-type: none"> <li>• 200V half-bridge driver IC</li> <li>• Micropower startup (&lt;500μA)</li> <li>• ±2% voltage reference</li> <li>• 140ns deadtime</li> <li>• 15.6V Zener clamp on VCC</li> <li>• Frequency up to 500 kHz</li> <li>• Auto restart, non-latched shutdown</li> <li>• PWM dimmable</li> </ul>
IRS25401SPbF	SO-8 Narrow	
IRS25401STRPbF	SO-8 Narrow (Tape and Reel)	
IRS25411PbF	DIP8	<ul style="list-style-type: none"> <li>• 600V half-bridge driver IC</li> <li>• Micropower startup (&lt;500μA)</li> <li>• ±2% voltage reference</li> <li>• 140ns deadtime</li> <li>• 15.6V Zener clamp on VCC</li> <li>• Frequency up to 500 kHz</li> <li>• Auto restart, non-latched shutdown</li> <li>• PWM dimmable</li> </ul>
IRS25411SPbF	SO-8 Narrow	
IRS25411STRPbF	SO-8 Narrow (Tape and Reel)	

note: The IRS254(01/11) are pin compatible drop in replacements for the IRS254(0/1)

