

## HIGH VOLTAGE BOOST DRIVER WITH 8 CHANNELS CONSTANT CURRENT REGULATORS

### DESCRIPTION

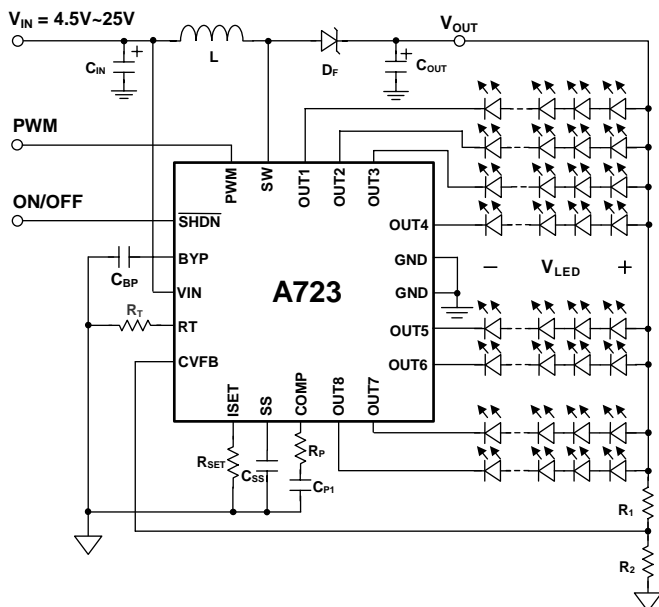
The A723 is a high voltage Boost driver with 8 channels adjustable constant current regulators for LED backlight applications. Eight regulated current ports are designed to provide uniform and pure DC constant current sinks for driving LEDs within a large range  $V_F$  variations. It can drive a number of LEDs in series/parallel configuration.

Users may adjust the output current from 5mA to 30mA through an external resistor,  $R_{SET}$ , which gives users flexibility in controlling the light intensity of LEDs. It also could adjust LED brightness from 0% to 100% via PWM pin with Pulse Width Modulation signal.

A feedback circuit is built in the between of Boost Driver and the Current Regulators. It could output the lowest dropout voltage among used channels to Boost Driver in order to maintain the output voltage in optimal level. An OVP circuit is built for open-loop protection when any string becomes open.

The thermal protection function protects IC from over temperature damage. Also, the exposed thermal pad enhances the package power dissipation.

### TYPICAL APPLICATION CIRCUIT



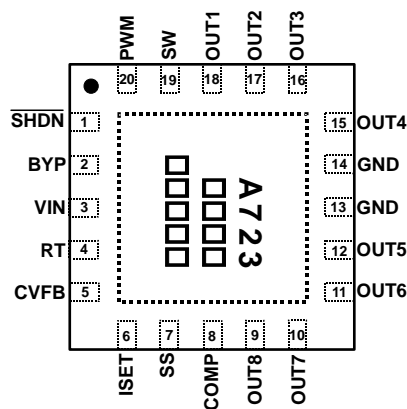
### FEATURES

- High frequency DC/DC converter for LEDs.
- Integrated 50V power MOSFET.
- 4.5V ~ 25V wide input voltage range.
- 8 constant-current output channels.
- Output current adjustable through external resistor.
- Constant output current range: 5mA~30mA.
- 45V current sinks breakdown voltage for up to 12 pcs of LEDs in series.
- LED open/short protection.
- Green Package.

### APPLICATIONS

- Automotive interior lighting
- LED backlight driver for NB and Monitors.

### PACKAGE PIN OUT



QFN 4mm x 4mm  
(Top View)

### ORDER INFORMATION

	<b>K</b>	QFN 4mm x 4mm
		20 pin
Green Part		A723KGT
Note: The letter "G" is marked for Green parts, and letter "T" is marked for Tape & Reel.		

Preliminary