

**Product Brief** 

#### WHITE LED DRIVER

**AP3008** 

## Description

The AP3008 is a 1.2MHz PWM boost switching regulator designed for constant-current white LED driver applications.

The AP3008 can drive a string of 2 to 3 white LEDs from a 2.7V supply in series, ensuring uniform brightness and eliminating several ballast resistors. The AP3008 implements a constant frequency 1.2MHz PWM control scheme. The high frequency PWM operation also saves board space by reducing external component sizes. To improve efficiency, the feedback voltage is set to 95 mV, which reduces the power dissipation in the current setting resistor.

The AP3008 is equipped with OVP protection ability, the SW pin monitors the output voltage and will turn off the device if an overvoltage condition is present to prevent damage from an open circuit condition.

### **Features**

- Inherently Uniform LED Current
- High Efficiency up to 84%
- Drives 2 to 3 LEDs from a 2.7V Supply
- 1.2MHz PWM Operation Frequency
- Requires Only 0.22μF Output Capacitor
- Shutdown Current:  $< 1\mu A$
- Built-in Output Overvoltage Protection
- Under Voltage Lock Out (UVLO)

# **Applications**

- Digital Cameras
- LCD modules
- GPS Receivers
- Cellular Phones
- PDAs, Handheld Computers

### **Parametric Table**

Feedback Voltage (Typ) (mV)	95	
Supply Current (Typ) (mA)	1.9	
Switch Frequency (Typ) (MHz)	1.2	
Switch Current Limit (Typ) (mA)	320	
Switch V <sub>CESAT</sub> (Typ) (mV)	350	
OVP Voltage (Typ) (V)	29	
Package	SOT-23-5L	

### **Benefits**

- Built-in Output Overvoltage Protection
- Very Competitive Price

### Additional Available Materials

- Samples
- Preliminary Datasheet
- Demo Board
- Application Note
- · ESD Report

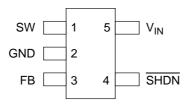


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# **Pin Configuration**

WHITE LED DRIVER

K Package (SOT-23-5L)



# **Ordering Information Example**

Package	Temperature	Part Number		Marking ID		Packing
	1 ackage	Range	Tin Lead	Lead Free	Tin Lead	Lead Free
SOT-23-5L	-40 to 85°C	AP3008KTR	AP3008KTR-E1	K1B	E1B	Tape & Reel

Detailed information please refer to the relevant datasheet.

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