


## LED Driver 2000uA Supply Current 10-Pin HVSSOP EP T/R

<b>Manufacturer:</b>	<a href="#">Texas Instruments, Inc</a>
<b>Package/Case:</b>	MSOP10
<b>Product Type:</b>	Optoelectronics
<b>RoHS:</b>	RoHS Compliant/Lead free 
<b>Lifecycle:</b>	Active



Images are for reference only

[Inquiry](#)

### General Description

The LM3409, LM3409-Q1, LM3409HV, and LM3409HV-Q1 are P-channel MOSFET (PFET) controllers for step-down (buck) current regulators. They offer wide input voltage range, high-side differential current sense with low adjustable threshold voltage and fast output enable/disable function and a thermally enhanced 10-pin, HVSSOP package. These features combine to make the LM3409 family of devices ideal for use as constant current sources for driving LEDs where forward currents up to 5 A are easily achievable.

The LM3409 devices use constant off-time (COFT) control to regulate an accurate constant current without the need for external control loop compensation. Analog and PWM dimming are easy to implement and result in a highly linear dimming range with excellent achievable contrast ratios. Programmable UVLO, low-power shutdown, and thermal shutdown complete the feature set.

For all available packages, see the orderable addendum at the end of the data sheet.

## Key Features

LM3409-Q1 and LM3409HV-Q1 are Automotive Grade Products: AEC-Q100 Grade 1 Qualified

2- , 1-A Peak MOSFET Gate Drive

$V_{IN}$  Range: 6 V to 42 V (LM3409, LM3409-Q1)

$V_{IN}$  Range: 6 V to 75 V (LM3409HV, LM3409HV-Q1)

Differential, High-Side Current Sense

Cycle-by-Cycle Current Limit

No Control Loop Compensation Required

10,000:1 PWM Dimming Range

250:1 Analog Dimming Range

Supports All-Ceramic Output Capacitors and Capacitor-less Outputs

Low-Power Shutdown and Thermal Shutdown

Thermally Enhanced 10-Pin, HVSSOP Package



## Recommended For You

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### LM2438T

Texas Instruments, Inc

TO-220-9

### LM3429Q1MHX/NOPB

Texas Instruments, Inc

HTSSOP14

### LM3409MY/NOPB

Texas Instruments, Inc

MSOP10

**LMB509SD/NOPB**

Texas Instruments, Inc  
QFN

**LMB406HVMHX/NOPB**

Texas Instruments, Inc  
TSSOP14

**LMB409MYX/NOPB**

Texas Instruments, Inc  
MSOP10

**LMB405AXMY/NOPB**

Texas Instruments, Inc  
HVSSOP8

**LM2406T**

Texas Instruments, Inc  
ZIP11

**LM2415T**

Texas Instruments, Inc  
ZIP11

**LM2469TA**

Texas Instruments, Inc  
TO-220-9

**LM2468TA**

Texas Instruments, Inc  
TO-220

**LM2467TA**

Texas Instruments, Inc  
TO-220-9

**LM2407T**

Texas Instruments, Inc  
ZIP11

**LMB410XMF/NOPB**

Texas Instruments, Inc  
SOT23-5

**LM2437T**

Texas Instruments, Inc  
TO-220-9