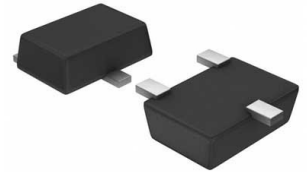


**Conv DC-DC 4V to 40V Step Down Single-Out 0.8V to 30V 0.6A  
Automotive 6-Pin TSOT-23 T/R**



Images are for reference only

**Manufacturer:** [Texas Instruments, Inc](#)

**Package/Case:** SOT23-6

**Product Type:** Power Management ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

[Inquiry](#)

## General Description

The LMR14006 is a PWM DC/DC buck (step-down) regulator. With a wide input range of 4 V-40 V, it is suitable for a wide range of application from industrial to automotive for power conditioning from an unregulated source. The regulator's standby current is 28  $\mu$ A in sleep mode, which is suitable for battery operating systems. An ultra low 1  $\mu$ A current can further prolong battery life in shutdown mode. Operating frequency is fixed at 1.1 MHz (X version) and 2.1 MHz (Y version) allowing the use of small external components while still being able to have low output ripple voltage. Soft-start and compensation circuits are implemented internally, and these allow the device to be used with minimized external components. The LMR14006 is optimized for up to 600 mA load current which has a 0.765 V typical feedback voltage. The device has built-in protection features such as pulse by pulse current limit, thermal sensing and shutdown due to excessive power dissipation. The LMR14006 is available in a low profile TSOT-6L package.

## Key Features

Ultra Low 28  $\mu$ A Standby Current in Sleep Mode

Input Voltage Range 4 V to 40 V

1  $\mu$ A Shutdown Current

High Duty Cycle Operation Supported

Output Current up to 600 mA

1.1 MHz and 2.1 MHz Switching Frequency

Internal Compensation

High Voltage Enable Input

Internal Soft Start

Over Current Protection

Over Temperature Protection

## Recommended For You

**LM2637M**

Texas Instruments, Inc  
SOP24

**LM5116MH**

Texas Instruments, Inc  
TSSOP20

**LM234Z-3**

Texas Instruments, Inc  
TO-92

**LM27761DSGR**

Texas Instruments, Inc  
WSO8

**LM74700QDBVRQ1**

Texas Instruments, Inc  
SOT23-6

**LM2991S**

Texas Instruments, Inc  
TO-263

**LM74800QDRRRQ1**

Texas Instruments, Inc  
WSO8-12

**LMR14030SDDAR**

Texas Instruments, Inc  
SOP8

**LM2940CT-12**

Texas Instruments, Inc  
TO-220

**LM536035QPWPTQ1**

Texas Instruments, Inc  
HTSSOP-16

**LM5575MH**

Texas Instruments, Inc  
TSSOP16

**LM536013QDSXTQ1**

Texas Instruments, Inc  
WSO8-10

**LM5160QPWPRQ1**

Texas Instruments, Inc  
HTSSOP14

**LM5576MH**

Texas Instruments, Inc  
TSSOP20

**LMQ61460AFSQRJRRQ1**

Texas Instruments, Inc  
VQFN-14