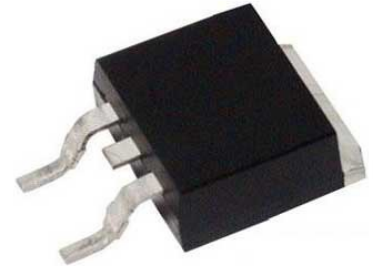


150 KHz 3A Step-Down Voltage Regulator, Switching Converters, Regulators & Controllers
3A BUCK SWCH 150KHZ

Manufacturers	ON Semiconductor, LLC
Package/Case	D2PAK
Product Type	Power Management ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for LM2596DSADJR4G or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LM2596 series of regulators are monolithic integrated circuits that provide all the active functions for a step-down (buck) switching regulator, capable of driving a 3-A load with excellent line and load regulation. These devices are available in fixed output voltages of 3.3 V, 5 V, 12 V, and an adjustable output version.

Requiring a minimum number of external components, these regulators are simple to use and include internal frequency compensation, and a fixed-frequency oscillator.

The LM2596 series operates at a switching frequency of 150 kHz, thus allowing smaller sized filter components than what would be required with lower frequency switching regulators. Available in a standard 7-pin TO-220 package with several different lead bend options, and a 7-pin TO-263 surface mount package.

A standard series of inductors are available from several different manufacturers optimized for use with the LM2596 series. This feature greatly simplifies the design of switch-mode power supplies.

Other features include a $\pm 4\%$ tolerance on output voltage under specified input voltage and output load conditions, and $\pm 15\%$ on the oscillator frequency. External shutdown is included, featuring typically 80 μA standby current. Self-protection features include a two stage frequency reducing current limit for the output switch and an overtemperature shutdown for complete protection under fault conditions.

Features

3.3-V, 5-V, 12-V, and Adjustable Output Versions

Adjustable Version Output Voltage Range: 1.2-V

to 37-V \pm 4% Maximum Over Line and Load

Conditions

Available in TO-220 and TO-263 Packages

3-A Output Load Current

Input Voltage Range Up to 40 V

Requires Only 4 External Components

Excellent Line and Load Regulation Specifications

150-kHz Fixed-Frequency Internal Oscillator

TTL Shutdown Capability

Low Power Standby Mode, IQ, Typically 80 μ A

High Efficiency

Uses Readily Available Standard Inductors

Thermal Shutdown and Current-Limit Protection

Application

ONSEMI

Related Products



[LM2594DADJR2G](#)

ON Semiconductor, LLC
SOIC-8



[LM317MABDTRKG](#)

ON Semiconductor, LLC
D2PAK



[NCP383LMUAJAATXG](#)

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[NCP380LMUAJAATBG](#)

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[LM317MABDTG](#)

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[LM317LBDG](#)

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SOIC-8



[NCV380LMUAJAATBG](#)

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UDFN-6