

## LT1076CT-5#PBF

Data Sheet

STEP-DOWN REGULATOR, 100KHZ, Input Voltage Min:7.3V, Input Voltage Max:45V, Output Current:2A, Switching Frequency:100kHz

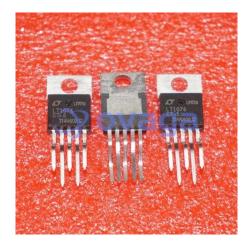
Manufacturers <u>Analog Devices, Inc</u>

Package/Case TO-220-5

Product Type Power Management ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LT1076CT-5#PBF or <a href="mailto-us:sales@ovaga.com"><u>Fmailto-us:sales@ovaga.com</u></a> We will contact you in 12 hours.

**RFO** 

## **General Description**

The LT1076-5 is a 2A fixed 5V output monolithic bipolar switching regulator which requires only a few external parts for normal operation. The power switch, all oscillator and control circuitry, all current limit components, and an output monitor are included on the chip. The topology is a classic positive "buck" configuration but several design innovations allow this device to be used as a positive-to-negative converter, a negative boost converter, and as a flyback converter. The switch output is specified to swing 40V below ground, allowing the LT1076-5 to drive a tapped inductor in the buck mode with output currents up to 4A.

The LT1076-5 uses a true analog multiplier in the feedback loop. This makes the device respond nearly instantaneously to input voltage fluctuations and makes loop gain independent of input voltage. As a result, dynamic behavior of the regulator is significantly improved over previous designs.

On-chip pulse by pulse current limiting makes the LT1076-5 nearly bust-proof for output overloads or shorts. The input voltage range as a buck converter is 8V to 60V, but a self-boot feature allows input voltages as low as 5V in the inverting and boost configurations.

The LT1076-5 is available in a low cost 5- and 7-lead TO-220 packages with frequency pre-set at 100kHz and current limit at 2.6A. See Application Note 44 for design details.

**Features** 

Fixed 5V Output

2A On-Board Switch

100kHz Switching Frequency

2% Output Voltage Tolerance Over Temperature

Greatly Improved Dynamic Behavior

Available in Low Cost 5- and 7-Lead Packages

Only 9.5mA Quiescent Current

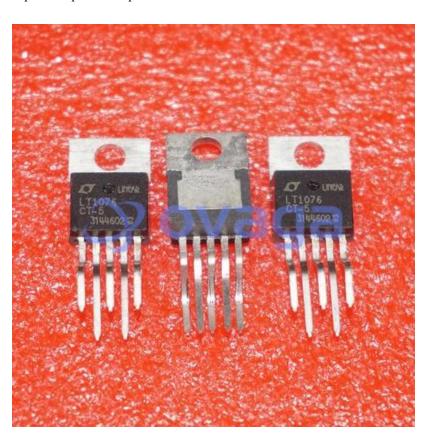
Operates Up to 60V Input

## Application

5V Output Buck Converter

Tapped Inductor Buck Converter with 4A Output at 5V

Positive-to-Negative Converter



## **Related Products**



LT3763EFE
Analog Devices, Inc
TSSOP28



LTC4417IUF

Analog Devices, Inc
QFN-24



LT1038CK
Analog Devices, Inc
TO-3



LTC3440EMS

Analog Devices, Inc
MSOP10



LTC1966CMS8#PBF

Analog Devices, Inc MSOP-8P



LTM8045EY#PBF

Analog Devices, Inc BGA40



LTC2990IMS#PBF

Analog Devices, Inc 10MSOP



LT4295IUFD#PBF

Analog Devices, Inc 28-WFQFN