

LM3402 Design Document

National Semiconductor
LM3402
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1.0 Design Specifications

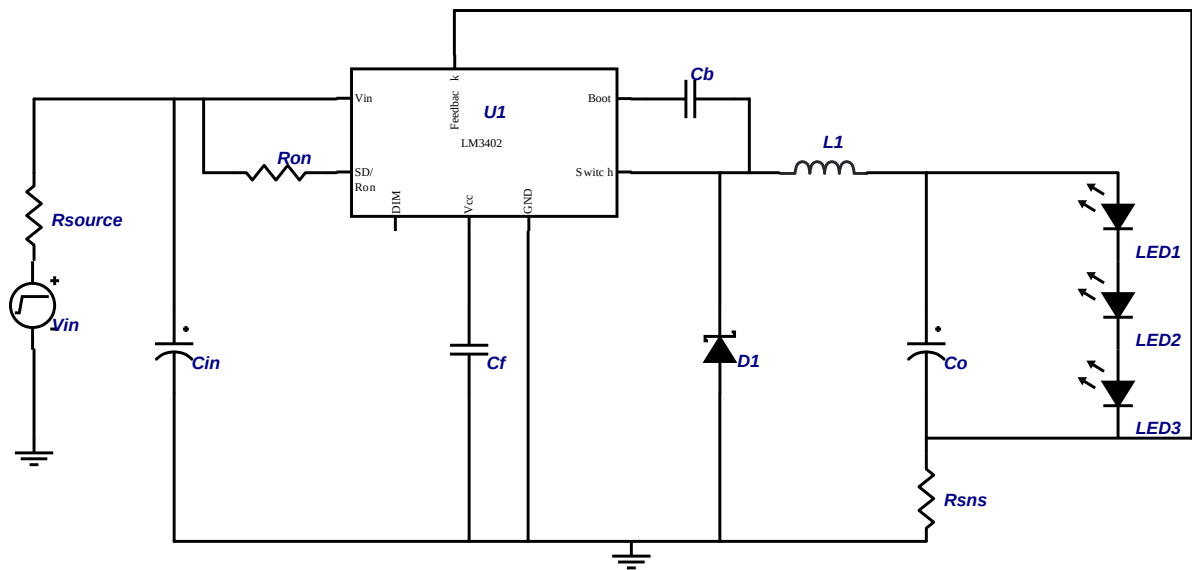
Inputs	Outputs #1
VinMin=11.3	Vout1=10.1
VinMax=12.6	Iout1=0.350

2.0 Design Description

This circuit is designed to drive three InGaN WLEDs at a forward current of 350 mA with a peak-to-peak ripple current of

35 mA or less. The input is 12V $\pm$ 5%, $V_o = 10.1V$, and the switching frequency is 600 kHz $\pm$ 10%.

3.0 Schematic



689758_1355_0

FIGURE 1. Example Schematic Showing Connection for all Components.

4.0 Bill Of Materials

Part	Manufacturer	Part#	Attributes
Cb	Vishay	VJ0805Y103KXXAT	10n F
Cf	Vishay	VJ0805Y104KXXAT	100n F
Cin	TDK	C3225X7R1H225M	NumCaps=1, 2.2u F
Co	Vishay	VJ0805Y334KXXAT	330n F
D1	Central Semiconductor	CMSH1-20M	0.5 V
L1	TDK	RLF5018T-220MR63	22u H, 0.16 Ohms
Ron	Vishay	CRCW08051273F	127k Ohms
Rsns	Panasonic	ERJ6BQFR51V	0.51 Ohms
U1	National Semiconductor	LM3402	

Notes

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