

LM3402HV Design Document

National Semiconductor
LM3402HV
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1.0 Design Specifications

Inputs	Outputs #1
VinMin=60.0	Vout1=23.3
VinMax=74.0	Iout1=0.35

2.0 Design Description

This circuit is designed to drive a string of 7 InGaN LEDs (V_f total 23.1V) at a forward current of 350 mA $\pm$ 5% with a peak-

to-peak ripple current of 70 mA or less. The input is 67V $\pm 10\%$. Switching frequency is 450 kHz $\pm 10\%$.

3.0 Schematic

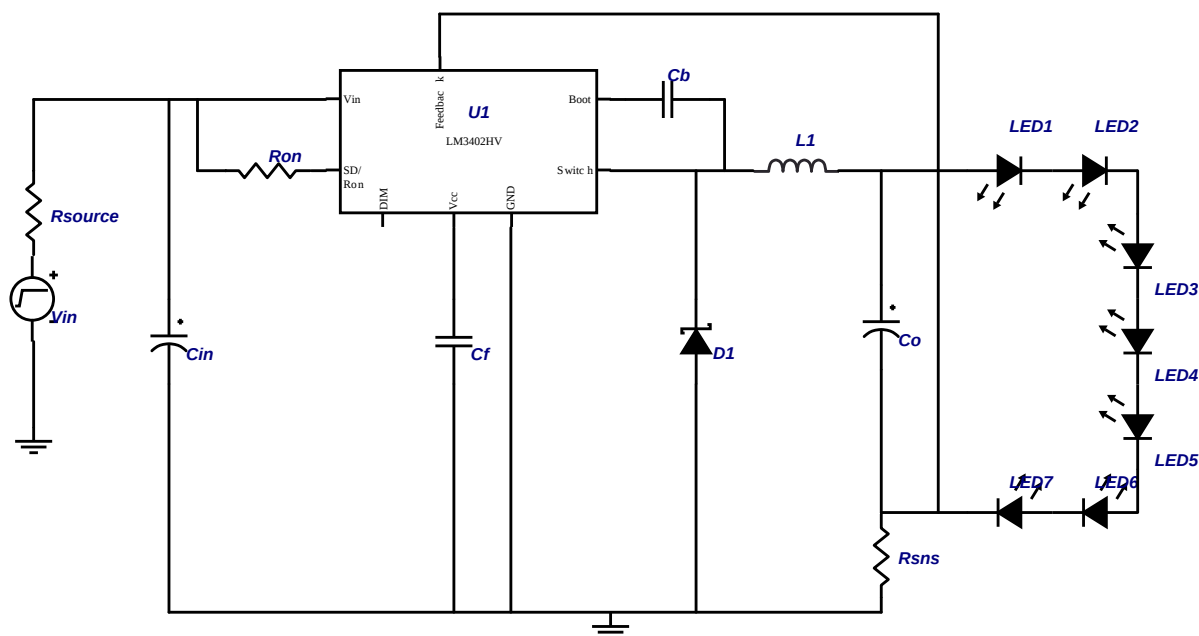


FIGURE 1. Example Schematic Showing Connection for all Components.

4.0 Bill Of Materials

Part	Manufacturer	Part#	Attributes
Cb	Vishay	VJ0805Y103KXXAT	10n F
Cf	Vishay	VJ0805Y104KXXAT	100n F
Cin	TDK	C4532X7R2E225M	NumCaps=1, 2.2u F
Co	TDK	C3216X71E104M	100n F
D1	Central Semiconductor	CMSH1-100M	0.5 V
L1	TDK	SLF10145T-221MR65	220u H, 0.47 Ohms
Ron	Vishay	CRCW08054553F	453k Ohms
Rsns	Panasonic	ERJ6BQFR68V	0.68 Ohms
U1	National Semiconductor	LM3402HV	

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Deutsch Tel: +49 (0) 69 9508 6208
English Tel: +49 (0) 870 24 0 2171
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