

LM3402HV Design Document

National Semiconductor
LM3402HV
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1.0 Design Specifications

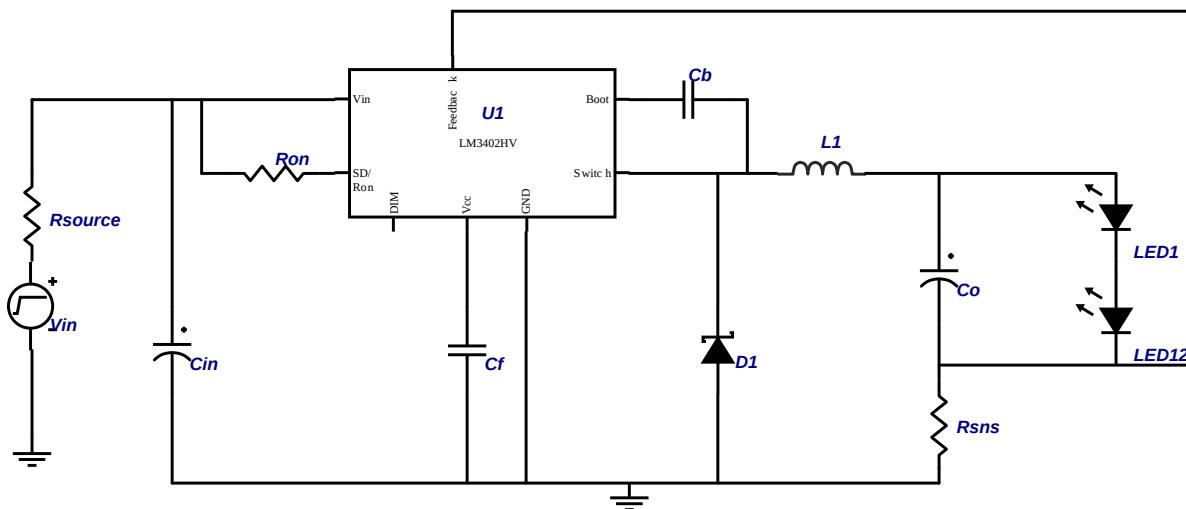
Inputs	Outputs #1
VinMin=47	Vout1=40.2
VinMax=49	Iout1=0.360

2.0 Design Description

This demonstration circuit is designed to drive a string of 12 InGaN LEDs (Vf total about 40V) at a forward current of 360

mA $\pm 3\%$ with a peak-to-peak ripple current of 40 mA or less. The input is 48V $\pm 2\%$. Switching frequency is 200 kHz $\pm 10\%$.

3.0 Schematic



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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	C3216X7R2A334M	330n F
D1	Central Semiconductor	CMSH1-60M	0.5 V
L1	TDK	SLF10145T-151MR79	150u H, 0.35 Ohms
Ron	Vishay	CRCW08052004F	2M Ohms
Rsns	Panasonic	ERJ6BQFR68V	0.68 Ohms
U1	National Semiconductor	LM3402HV	

Notes

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