



1.0 Design Specifications

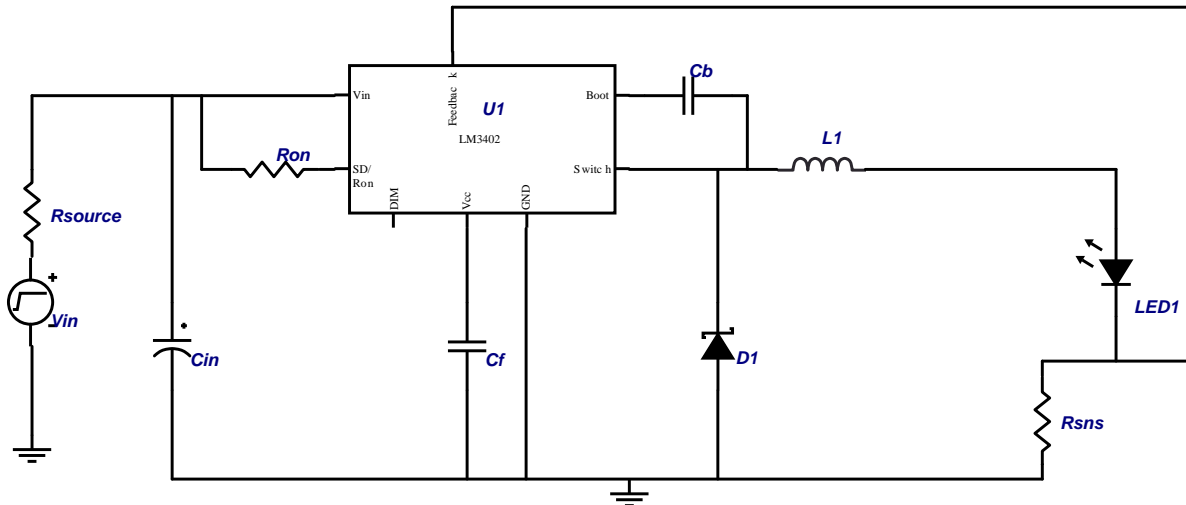
Inputs	Outputs #1
VinMin=9	Vout1=3.5
VinMax=9	Iout1=0.160

2.0 Design Description

This demonstration circuit is designed to drive a single LED (InGaN or AlInGaP, Vf = 2.5V to 3.5V) at a forward current of

375 mA +- 5% with a peak-to-peak ripple current of 160 mA or less. The input is a 9V alkaline battery. Switching frequency is 800 kHz +-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	C3225X7R1H225M	NumCaps=1, 2.2u F
D1	Central Semiconductor	CMHSH5-2L	0.5 V
L1	Coilcraft	MSS5131-223ML	22u H, 0.16 Ohms
Ron	Vishay	CRCW08052942F	29.4k Ohms
Rsns	Panasonic	ERJ6BQFR56V	0.56 Ohms
U1	National Semiconductor	LM3402	

Notes

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