



## 1.0 Design Specifications

Inputs	Outputs #1
VinMin=8	Vout1=5.2
VinMax=42	Iout1=0.35

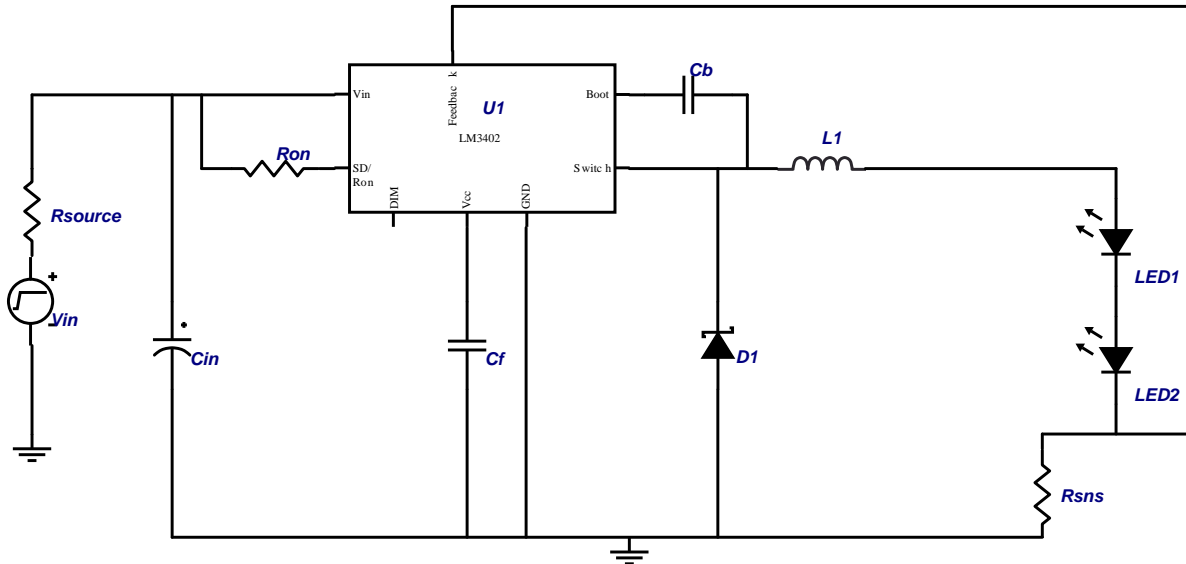
## 2.0 Design Description

This circuit has been designed to drive a string of two AllnGaP red or amber LEDs (total  $V_o = 5.2V$ ) at a forward current of 350 mA  $\pm$ 10% mA with a peak-to-peak ripple current of 140

mA or less. The input is 8V to 42V, with LED current and switching frequency (600 kHz) centered at  $V_{in} = 24V$ .

In expectation of fast PWM dimming requirements there is no output capacitor used in this design.

## 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	CMSH1-60M	0.5 V
L1	TDK	SLF7045T-680MR75-1PF	68u H, 0.27 Ohms
Ron	Vishay	CRCW08056492F	64.9k Ohms
Rsns	Panasonic	ERJ6BQFR62V	0.62 Ohms
U1	National Semiconductor	LM3402	

## Notes

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