



## 1.0 Design Specifications

Inputs	Outputs #1
VinMin=10.2	Vout1=3.7
VinMax=26.4	Iout1=0.350

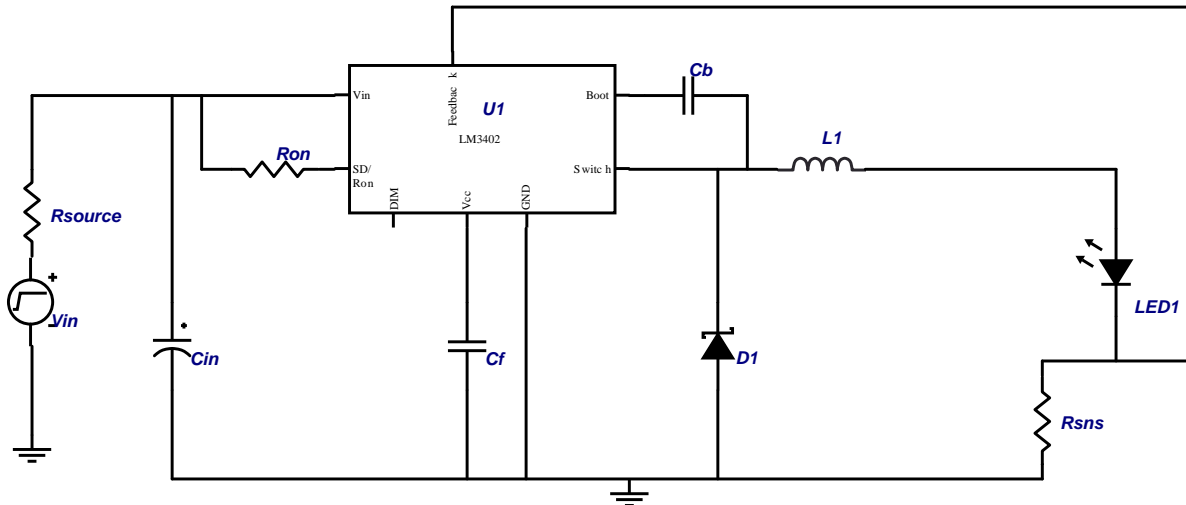
## 2.0 Design Description

This circuit is designed to drive a single InGaN WLED ( $V_f = 3.5V$ ) at a forward current of 350 mA  $\pm 5\%$  with a peak-to-peak ripple current of 150 mA or less. The input is 10.2V to

26.4V, with LED current and switching frequency (300 kHz) optimized at  $V_{in} = 18.3V$ .

This circuit is rated to withstand input voltage surges up to 40V.

## 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	CMSH1-40M	0.5 V
L1	TDK	SLF7045T-680MR60	68u H, 0.18 Ohms
Ron	Vishay	CRCW08051023F	102k Ohms
Rsns	Panasonic	ERJ6BQFR68V	0.68 Ohms
U1	National Semiconductor	LM3402	

## Notes

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