

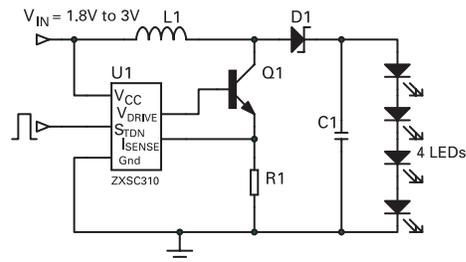
## Design Note 64

# ZXSC310 Solution Flashlight

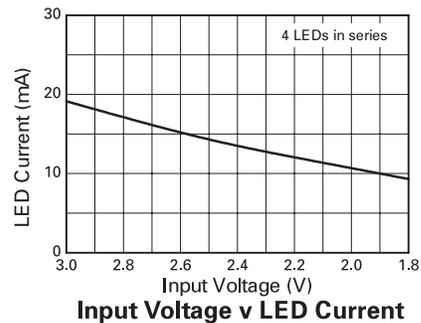
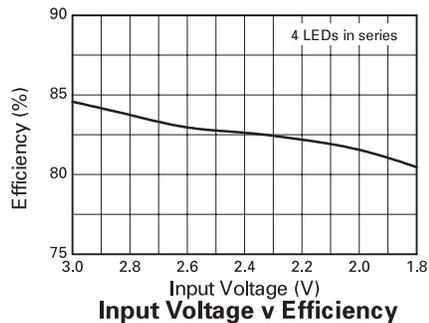
### Aim

A solution is provided for flashlight driving 4 white LEDs connected in series from a 2 alkaline cell input.

### Circuit diagram



### Performance graphs



### Bill of Materials

Reference	Part No.	Value	Manufacturer	Contact Details
U1	ZXSC310E5	LED Driver	Zetex	<a href="http://www.zetex.com">www.zetex.com</a>
Q1	FMMT618	2.5A, low $V_{CE(SAT)}$	Zetex	<a href="http://www.zetex.com">www.zetex.com</a>
D1	ZHCS1000	1A, low $V_F$	Zetex	<a href="http://www.zetex.com">www.zetex.com</a>
L1	LPO2506OB-683	68 $\mu$ H, 0.4A	Coilcraft	<a href="http://www.coilcraft.com">www.coilcraft.com</a>
R1	Generic	130m $\Omega$	Generic	
C1	Generic	2.2 $\mu$ F	Generic	
LED1-4	Learn-4753A	White LED	LG Innotek	<a href="http://www.lginnotek.com">www.lginnotek.com</a>

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