



## UC3501

Preliminary

CMOS IC

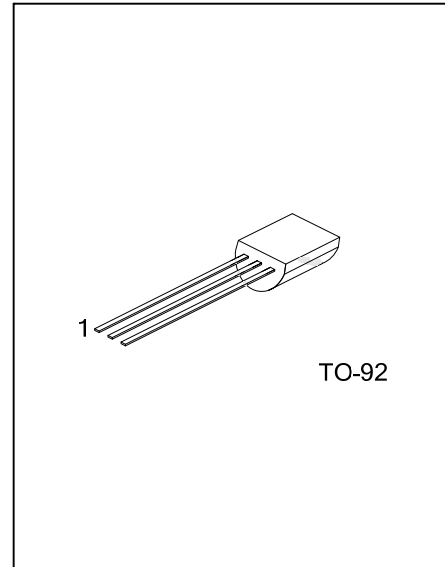
### HIGH EFFICIENT, LOW COST FLASHLIGHT LED DRIVE

#### DESCRIPTION

UTC **UC3501** is Flashlight ASIC chip, Using LSI technology, Specifically designed for single dry battery, Plus 1 of inductors, May constitute a drive circuit for LED flashlights.

#### FEATURES

- \* High efficiency:85%~90%
- \* Low cost
- \* Simply add-ins one inductor



#### ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
UC3501L-T92-B	UC3501G-T92-B	TO-92	O	D	G	Tape Box
UC3501L-T92-K	UC3501G-T92-K	TO-92	O	D	G	Bulk

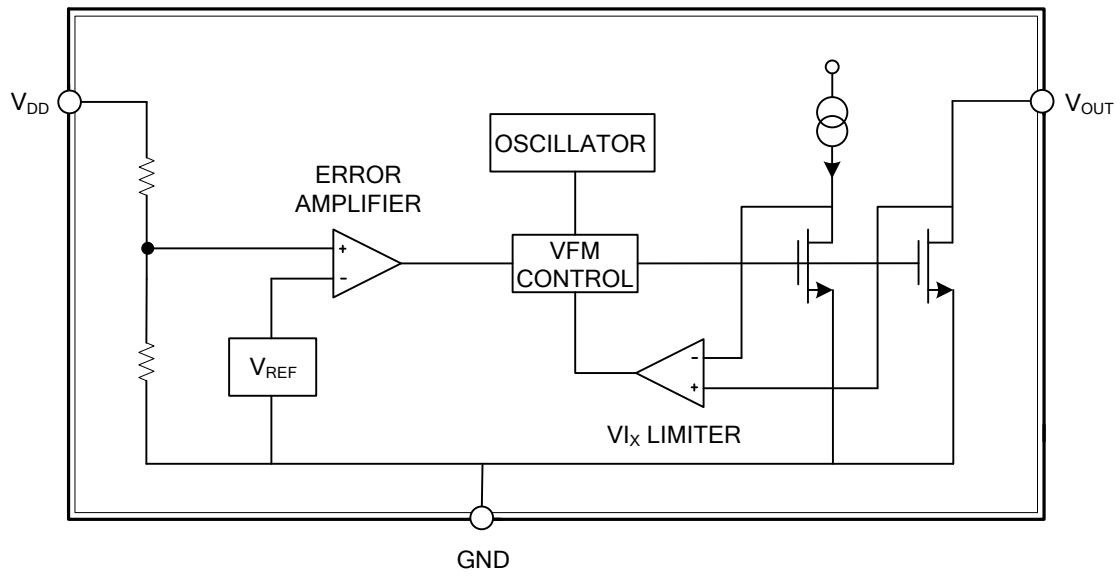
Note: Pin Assignment: G: GND D: V<sub>DD</sub> O: OUT

<p>UC3501L-T92-B</p> <p>(1)Packing Type (2)Package Type (3)Lead Free</p>	<p>(1) B: Tape Box, K: Bulk (2) T92: TO-92 (3) L: Lead Free, G: Halogen Free</p>
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#### MARKING INFORMATION

PACKAGE	MARKING
TO-92	<p>UTC UC3501 □ □ □ □ 1</p> <p>L: Lead Free G: Halogen Free Data Code</p>

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

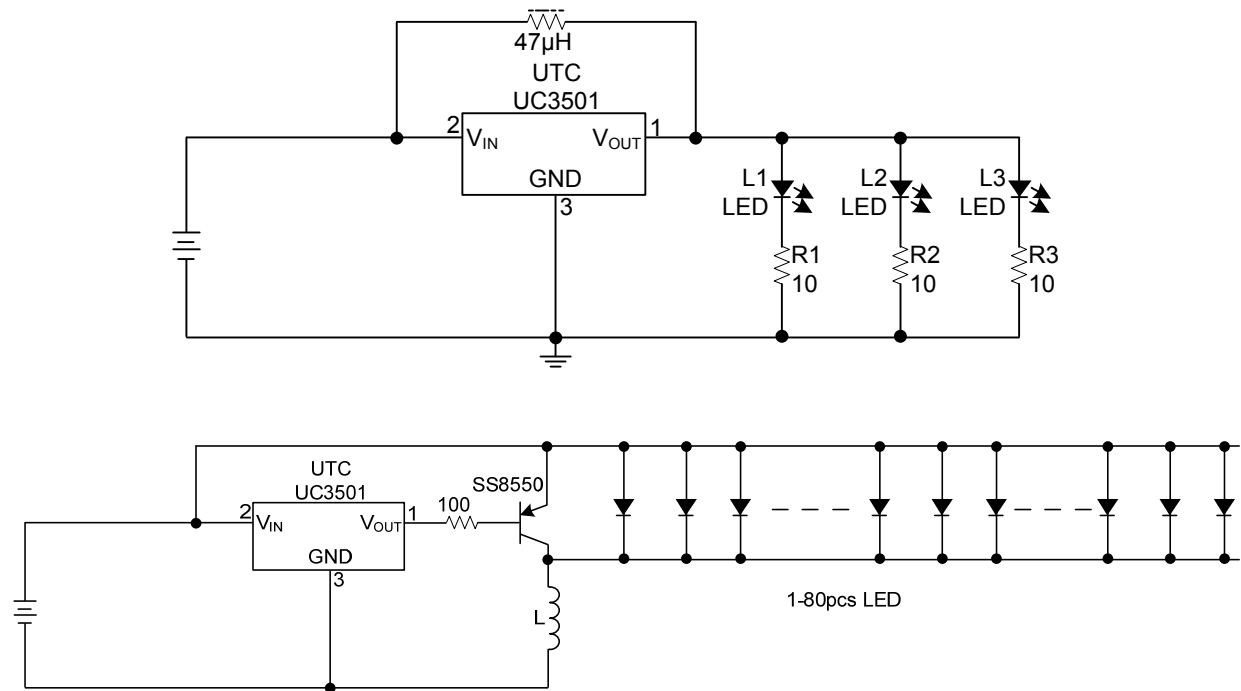
PARAMETER	SYMBOL	RATINGS	UNIT
Input Voltage	$V_{IN}$	6	V
Output Current	$I_{OUT}$	150	mA
Operating Junction Temperature	$T_J$	-40~85	°C
Storage Temperature	$T_{STG}$	-55~150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.  
 Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage	$V_{DD}$		0.9		5.0	V
Start Voltage	$V_{START}$			0.9		V
Output Current	$I_{OUT}$			100		mA
Oscillator Frequency	$F_{OSC}$			100		KHz
Efficiency	$\eta$			85		%

■ TYPICAL APPLICATION CIRCUIT



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