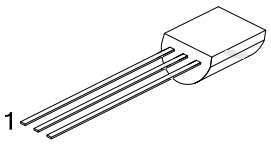
HIGH EFFICIENT, LOW COST FLASHLIGHT LED DRIVE



TO-92

■ 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_{DD} O: OUT

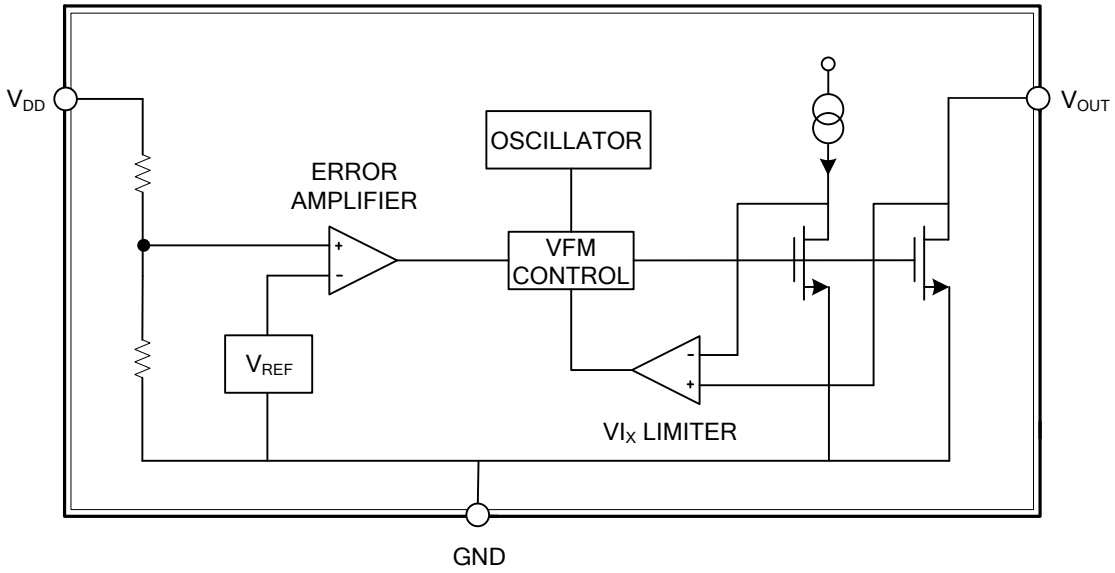
UC3501L-T92-B
(1)Packing Type
(2)Package Type
(3)Lead Free

(1) B: Tape Box, K: Bulk
(2) T92: TO-92
(3) L: Lead Free, G: Halogen Free

■ MARKING INFORMATION

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

■ 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°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	η			85		%

■ TYPICAL APPLICATION CIRCUIT