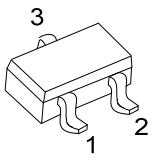
ULC6002 **Preliminary** ***LINEAR INTEGRATED CIRCUIT***

SPECIAL DRIVE FOR LED FLASHLIGHT



SOT-23-3
(JEDEC TO-236)

■ DESCRIPTION

UTC **ULC6002** is a drive chip designed specifically for LED flashlights using dry batteries. It is suitable for one or two LED drives for dry battery applications. It only needs one inductive element on the periphery and is adjusted by the peripheral inductive element. Can meet the LED flashlight for different brightness requirements.

UTC **ULC6002** has high reliability, high efficiency, wide operating voltage range, simple to use, and good production consistency.

■ FEATURES

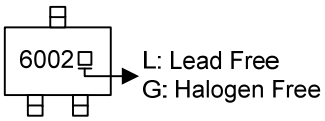
* Minimum operating input voltage 0.9V
* Over 100mA output current
* 85% efficiency

■ ORDERING INFORMATION

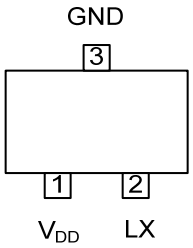
Ordering Number		Package	Packing
Lead Free	Halogen Free		
ULC6002L-AE2-R	ULC6002G-AE2-R	SOT-23-3	Tape Reel

ULC6002G-AE2-R (1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AE2: SOT-23-2 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



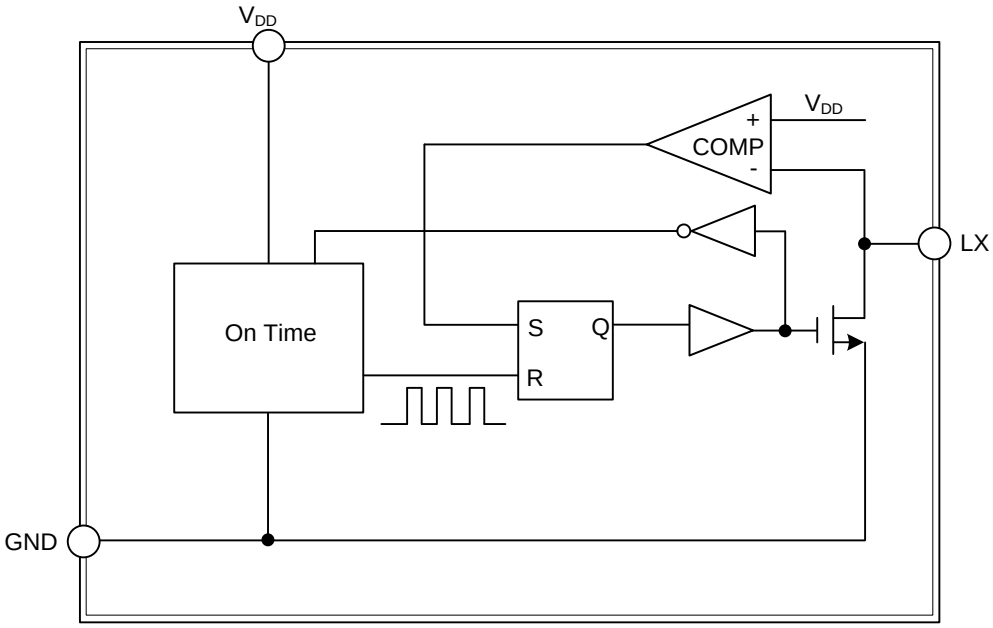
■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	V_{DD}	Power Pin
2	LX	LED Drive
3	GND	Ground.

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATINGS	UNIT
LX	$V_{LX\ MAX}$	7	V
V_{DD}	$V_{DD\ MAX}$	7	V
Junction Temperature	T_J	+125	°C
Operating Temperature	T_{OPR}	-20 ~ +85	°C
Storage Temperature	T_{STG}	-40 ~ +125	°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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Power	V_{DD}		0.9		3.2	V
On Time	T	V_{DD}=2V		3.5		uS
Efficiency				85		%

■ TYPICAL APPLICATION CIRCUIT