



UL67C

CMOS IC

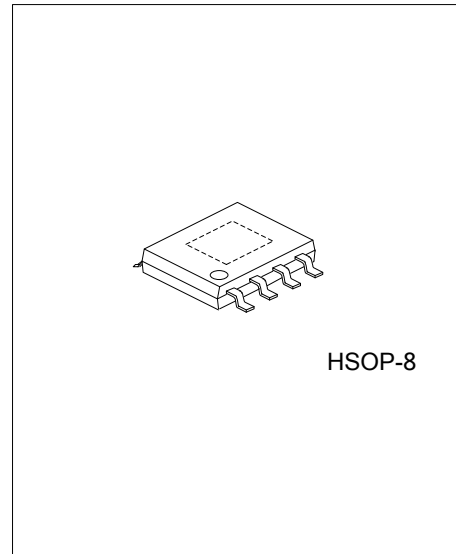
HIGH ACCURACY LINEAR CONSTANT CURRENT LED DRIVER

DESCRIPTION

The UTC **UL67C** is a linear constant current IC with a built-in power MOSFET. The output current can be adjusted from 5mA to 60mA, and constant current accuracy up to $\pm 4\%$. The application scheme is simple and the cost is low. This device also incorporates temperature compensation and thermal shutdown functions.

FEATURES

- * 5mA ~ 60mA Output Current
- * Up to $\pm 4\%$ Constant Current Accuracy
- * Built-in Power MOSFET
- * No EMC Problem
- * Temperature Compensate
- * Thermal Shutdown



ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
UL67CL-xx-SH2-R	UL67CG-xx-SH2-R	HSOP-8	Tape Reel

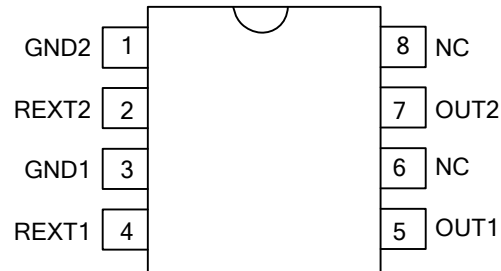
<p>UL67CG-xx-SH2-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Output Voltage Code (4) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) SH2: HSOP-8 (3) xx: Refer to Marking Information (4) G: Halogen Free and Lead Free, L: Lead Free
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MARKING INFORMATION

PACKAGE	VOLTAGE CODE	MARKING
HSOP-8	03: 0.3V 06: 0.6V	<p> UTC □ □ □ □ → Date Code L: Lead Free G: Halogen Free □ □ □ □ → Lot Code Voltage Code ← □ □ □ □ </p>

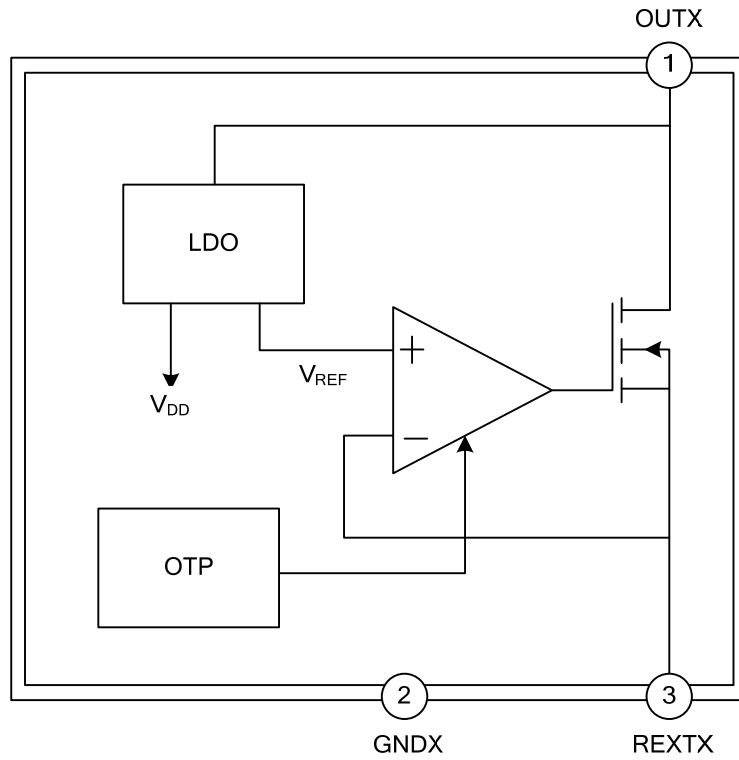
PIN CONFIGURATION



PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	GND2	Ground2.
2	REXT2	Output2 Current Setting Pin.
3	GND1	Ground1.
4	REXT1	Output1 Current Setting Pin.
5	OUT1	Current Output1 Pin.
6, 8	NC	
7	OUT2	Current Output2 Pin.

■ BLOCK DIAGRAM



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■ ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATINGS	UNIT
OUT Pin Voltage	V_{OUT}	-0.5 ~ 450	V
OUT Pin Current	I_{OUT}	5 ~ 60	mA
Junction Temperature	T_J	-40 ~ +150	°C
Storage Temperature	T_{STG}	-50 ~ +150	°C

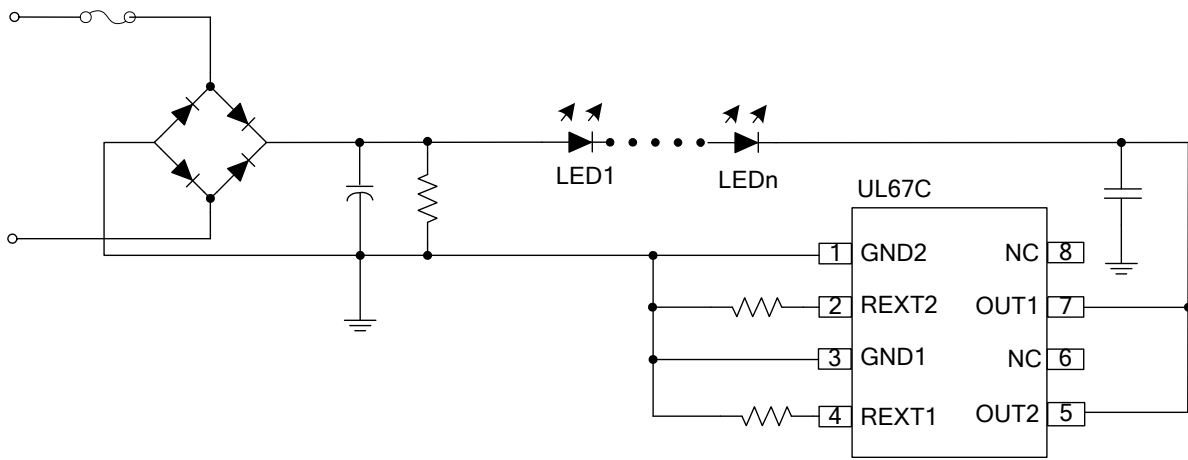
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ RECOMMENDED OPERATING CONDITIONS

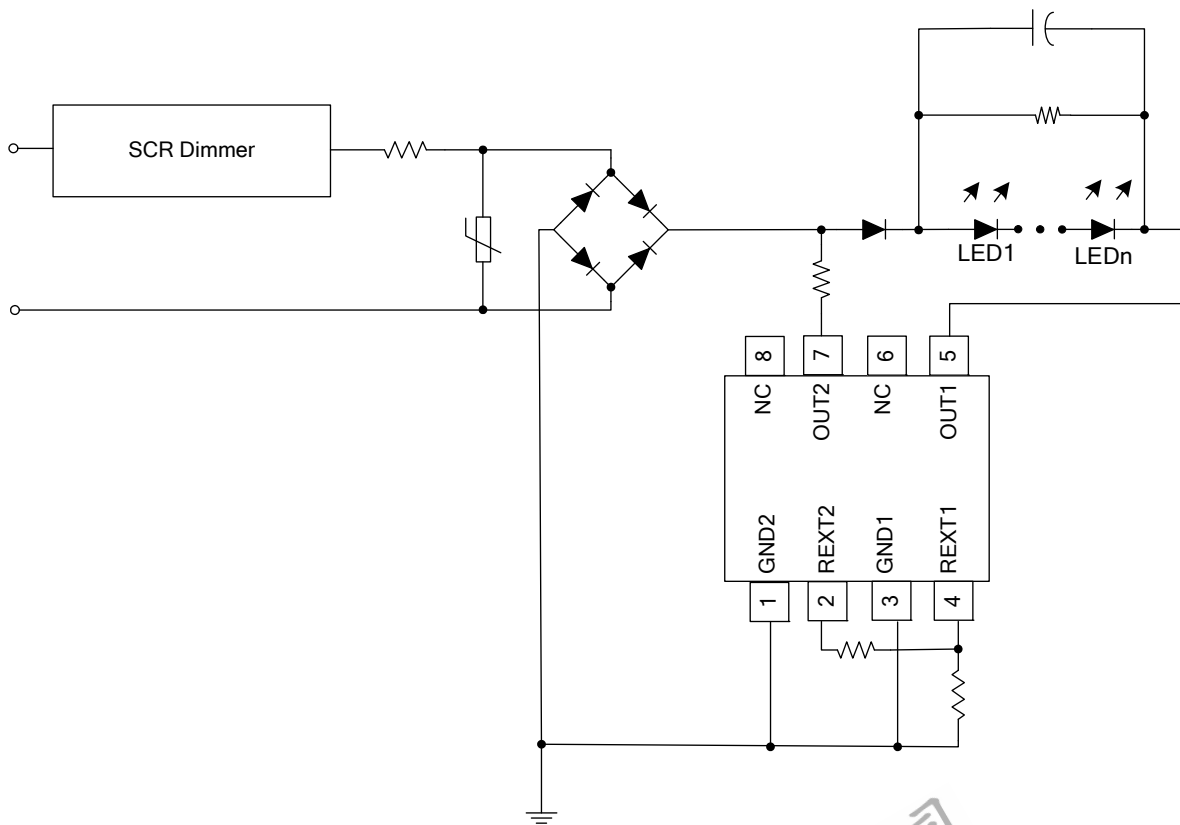
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OUT Pin Voltage	V_{OUT}	$I_{OUT}=30mA$	6.5			V
OUT Pin Withstanding Voltage		$I_{OUT}=0$	450			V
Output Current	I_{OUT}		5		60	mA
Quiescent Current	I_Q	$V_{OUT}=10V$ REXT No Collection		0.16	0.25	mA
REXT Pin Voltage	V_{REXT}	$V_{OUT}=10V$		0.3		V
				0.6		V
Output Current Error		$I_{OUT}=5\sim 60mA$		± 4		%
Temperature Compensate Point	T_{CP}			140		°C

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■ TYPICAL APPLICATION CIRCUIT



■ TRIC APPLICATION CIRCUIT



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