

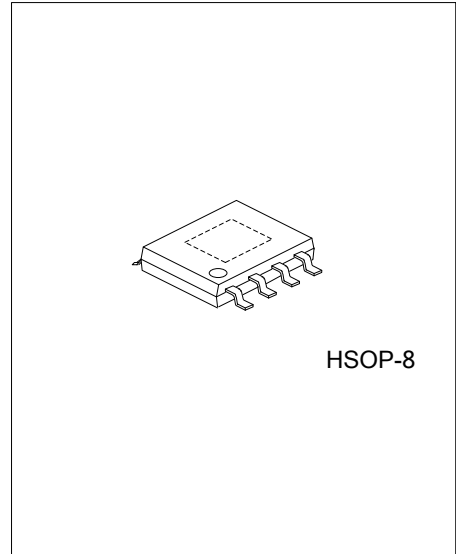


UL67C

Preliminary

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 $\pm 3\%$. The application scheme is simple and the cost is low. This device also incorporates temperature compensation and thermal shutdown functions.

FEATURES

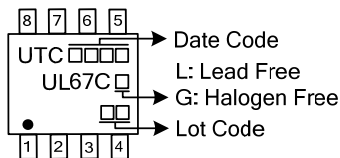
- * 5mA ~ 60mA Output Current
- * Up to $\pm 4\%$ Constant Current Accuracy
- * Built-in Power MOSFET
- * No EMC Problem
- * Temperature Compensate
- * Thermal Shutdown

ORDERING INFORMATION

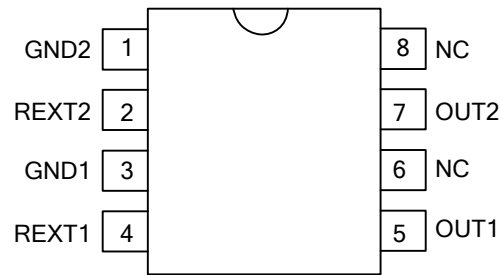
Ordering Number		Package	Packing
Lead Free	Halogen Free		
UL67CL-SH2-R	UL67CG-SH2-R	HSOP-8	Tape Reel

<p>UL67CG-SH2-R</p> <ul style="list-style-type: none"> (1) Packing Type (2) Package Type (3) Green Package 	<ul style="list-style-type: none"> (1) R: Tape Reel (2) SH2: HSOP-8 (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING



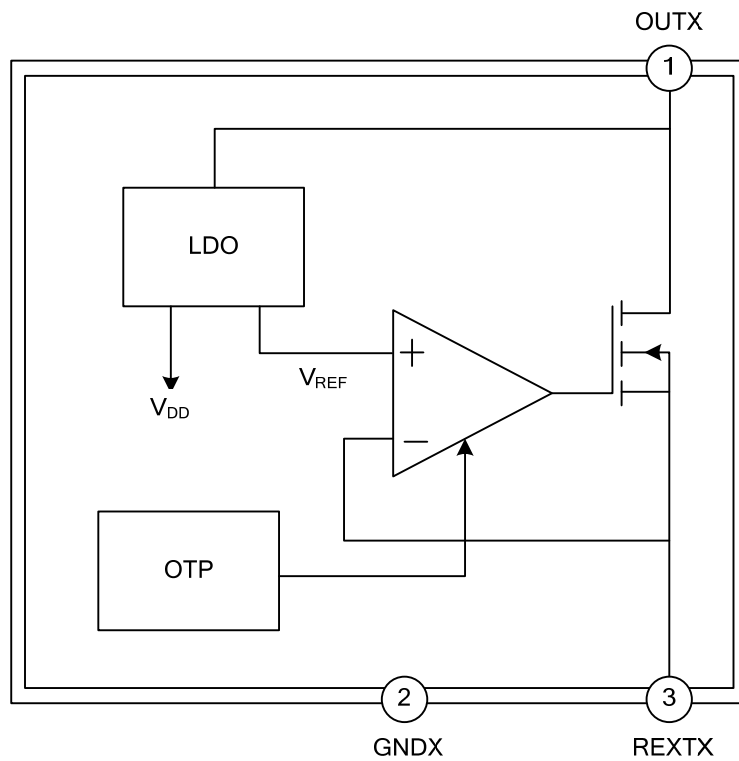
■ PIN CONFIGURATION



■ 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	NC	
7	OUT2	Current Output2 Pin.
8	NC	

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

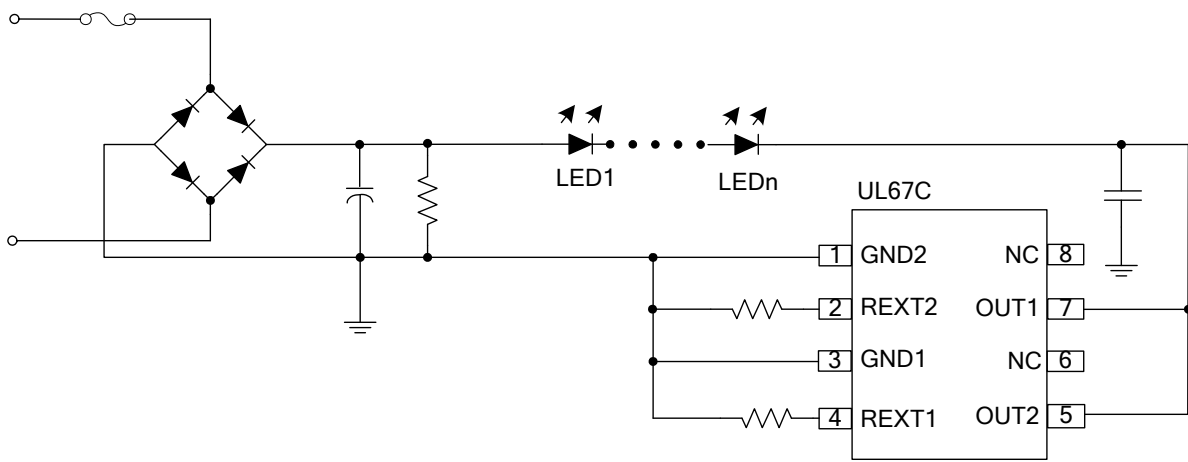
PARAMETER	SYMBOL	RATINGS	UNIT
OUT Pin Voltage	V_{OUT}	-0.5 ~ 450	V
OUT Pin Current	I_{OUT}	5 ~ 60	mA
Junction Temperature	T_J	-40 ~ +150	°C
Storage Temperature	T_{STG}	-50 ~ +150	°C

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.

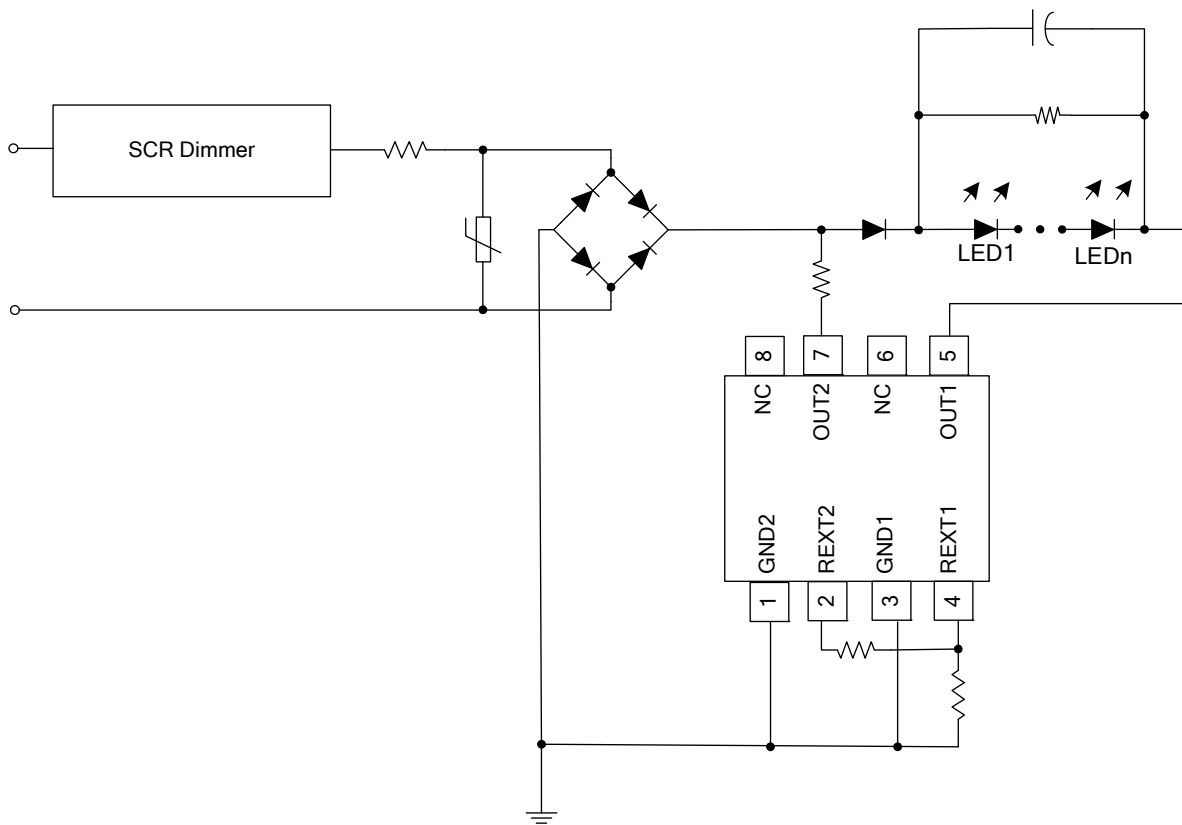
■ RECOMMENDED OPERATING CONDITIONS (Note)

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}	$V_{OUT}=10V$		0.6		V
Output Current Error		$I_{OUT}=5\sim 60mA$		± 4		%
Temperature Compensate Point	T_{CP}			140		°C

■ TYPICAL APPLICATION CIRCUIT



■ TRIC APPLICATION CIRCUIT



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