# UTC UNISONIC TECHNOLOGIES CO., LTD

UC34363

**Preliminary** 

LINEAR INTEGRATED CIRCUIT

SOP-8

## CONSTANT VOLTAGE AND **CONSTANT CURRENT** CONTROLLER FOR BATTERY **CHARGERS**

#### DESCRIPTION

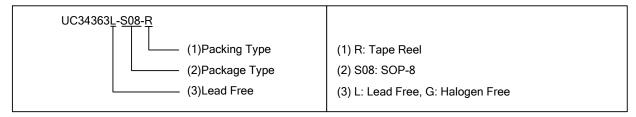
The UTC UC34363 is a switch controller for constant voltage, constant current (CV/CC) application. The device could be used for battery charge. UTC UC34363 is used of SOP-8 packages. Additionally the UTC UC34363 intergrated a internal compensation capacitor, so that the application is simplicial.

#### **FEATURES**

- \* CV/CC linear charge
- \* 3A maximum charge current
- \* PWM control Mode
- \* Available charge current
- \* Over Voltage protect ,Over Current Protect
- \* Enable Control function
- \* Very Low Power Dissipation in Standby Mode

#### **ORDERING INFORMATION**

Ordering Number		Doolsono	Packing	
Lead Free	Halogen Free	Halogen Free Package		
UC34363L-S08-R	UC34363G-S08-R	SOP-8	Tape Reel	



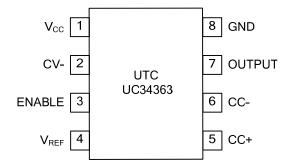
#### MARKING INFORMATION

PACKAGE	MARKING
SOP-8	B 7 6 5  UTC OCCUPATION Date Code L: Lead Free L: Lead Free C: Halogen Free Lot Code

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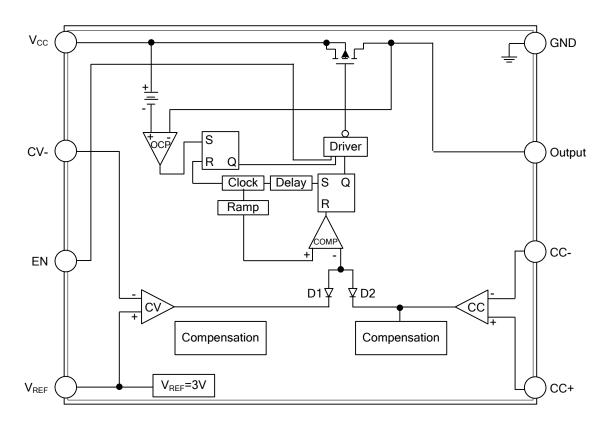
#### **■ PIN CONFIGURATION**



#### **■ PIN DESCRIPTION**

PIN NO.	PIN NAME	DESCRIPTION	
1	$V_{CC}$	Power Supply	
2	CV-	Negative Input of the Voltage Amplifier	
3	ENABLE	Enable Controlled ON/OFF for IC	
4	$V_{REF}$	3V external Voltage Reference	
5	CC+	Positive Input of Current Amplifier	
6	CC-	Negative Input of Current Amplifier	
7	OUTPUT	Output	
8	GND	Ground	

#### **■ BLOCK DIAGRAM**



#### ■ ABSOLUTE MAXIMUM RATING

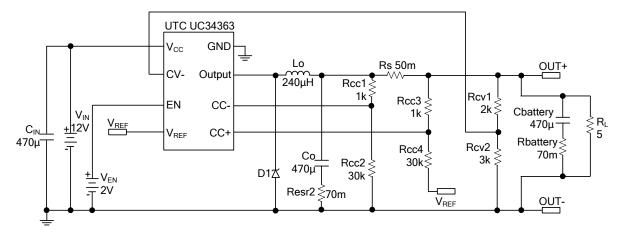
PARAMETER	SYMBOL	RATINGS	UNIT
Power Supply Voltage	$V_{CC}$	30	V
CC+ Voltage	V <sub>CC</sub> +	10	V
CC- Voltage	V <sub>CC</sub> -	10	V
CV- Voltage	V <sub>CV</sub> -	10	V
Operating Junction Temperature	TJ	125	°C

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.

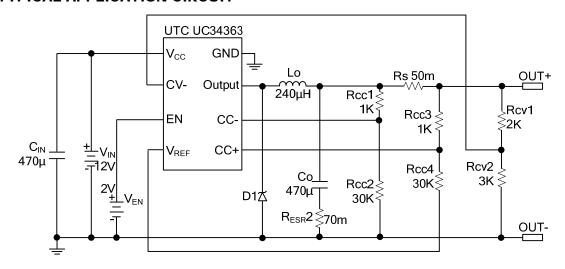
### ■ **ELECTRICAL CHARACTERISTICS** (V<sub>IN</sub>=15V, T<sub>A</sub>=25°C, Unless otherwise specified)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Vcc		8		30	V
ISTANDBY	V <sub>CC</sub> = 30V		7	15	mA
			ā.	ā.	
Fosc			75		KHZ
			_	_	_
СС	$R_S$ =50m $\Omega$ , Rcc1=Rcc3=1K, Rcc2=Rcc4=30K		2		Α
			_	_	_
$V_{ON}$		2			V
$V_{OFF}$				1.5	V
$V_{REF}$	I <sub>LOAD</sub> =5mA		3.0		V
			•	•	•
T <sub>OTP</sub>			150		°C
	V <sub>CC</sub> ISTANDBY  FOSC  CC  Von Voff  VREF	V <sub>CC</sub> I <sub>STANDBY</sub> V <sub>CC</sub> = 30V           Fosc         CC         R <sub>S</sub> =50mΩ, Rcc1=Rcc3=1K, Rcc2=Rcc4=30K           V <sub>ON</sub> V <sub>OFF</sub> V <sub>REF</sub> I <sub>LOAD</sub> =5mA	V <sub>CC</sub> 8           I <sub>STANDBY</sub> V <sub>CC</sub> = 30V           F <sub>OSC</sub> CC           R <sub>S</sub> =50mΩ, Rcc1=Rcc3=1K, Rcc2=Rcc4=30K           V <sub>ON</sub> 2           V <sub>OFF</sub> V <sub>REF</sub>	V <sub>CC</sub> 8           I <sub>STANDBY</sub> V <sub>CC</sub> = 30V         7           F <sub>OSC</sub> 75           CC         R <sub>S</sub> =50mΩ, Rcc1=Rcc3=1K, Rcc2=Rcc4=30K         2           V <sub>ON</sub> 2           V <sub>OFF</sub> V <sub>OFF</sub> V <sub>REF</sub> I <sub>LOAD</sub> =5mA         3.0	V <sub>CC</sub> 8         30           I <sub>STANDBY</sub> V <sub>CC</sub> = 30V         7         15           F <sub>OSC</sub> 75         75           CC         R <sub>S</sub> =50mΩ, Rcc1=Rcc3=1K, Rcc2=Rcc4=30K         2           V <sub>ON</sub> 2         1.5           V <sub>REF</sub> I <sub>LOAD</sub> =5mA         3.0

#### **■ TEST CIRCUIT**



#### ■ TYPICAL APPLICATION CIRCUIT



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