



UEC002

Advance

LINEAR INTEGRATED CIRCUIT

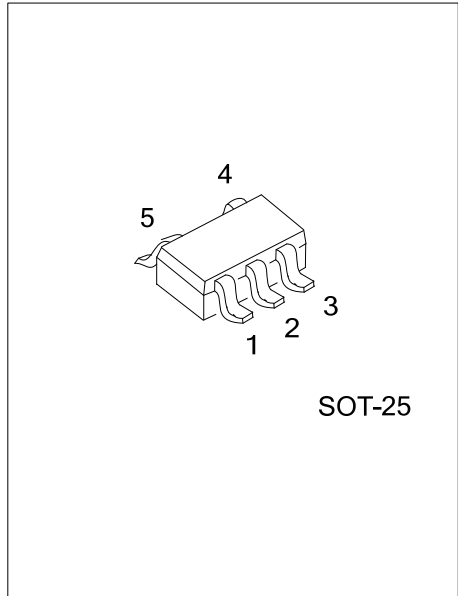
AIR FLOW INDUCTION SWITCH FOR ELECTRONIC CONTROL

DESCRIPTION

The UTC **UEC002** is a dedicated electronic smoke flow switch chip, integrated MOSFET chip, airflow induction circuit, over-current protection circuit, anti-interference protection circuit. Less peripheral components, only 1 capacitor and 1 airflow switch.

FEATURES

- * Ultra low static current (< 6μA)
- * Standby mode, the chip OUT pin is in high-level state, and the chip outputs low levels when smoking, which has the function of backward airflow interference without output.
- * Smoking process, the maximum low level output time of chip OUT pin is 12S and the low output will stop after 12S.
- * Over-current protection

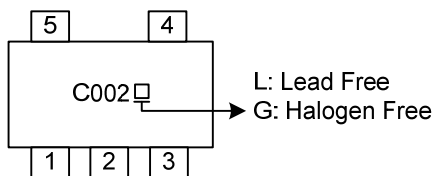


ORDERING INFORMATION

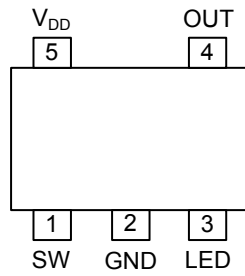
Ordering Number		Package	Packing
Lead Free	Halogen Free		
UEC002L-AF5-R	UEC002G-AF5-R	SOT-25	Tape Reel

<p>UEC002G-AF5-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) AF5: SOT-25 (3) G: Halogen Free and Lead Free, L: Lead Free
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MARKING



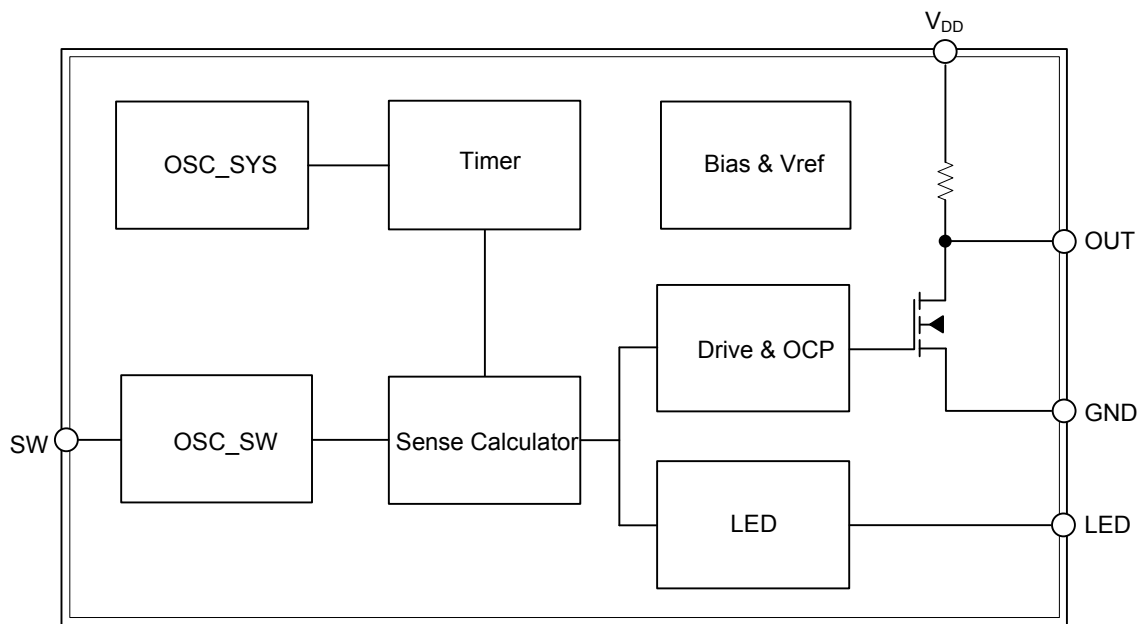
■ PIN CONFIGURATION



■ PIN DESCRIPTION

PIN NO.	PIN NAME	DESCRIPTION
1	SW	Connect the nipple and detect the change of the capacitance value of the nipple
2	GND	Ground
3	LED	Connect LED
4	OUT	Output
5	V _{DD}	Power supply

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

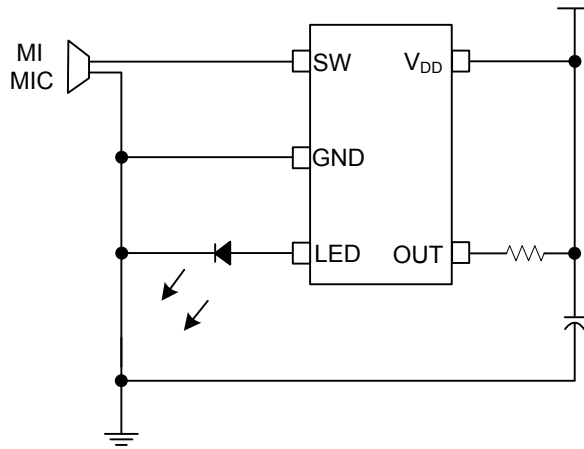
PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	V_{DD}	0 ~ 5	V
Operating Temperature	T_{OPR}	-20 ~ +80	°C
Storage Temperature	T_{STG}	-40 ~ +120	°C

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
Supply Voltage	V_{DD}		2		5	V
Standby Current	I_S	$V_{DD}=3.7V$			6	μA
Smoking Start Time	T		30		100	ms
OUT Output Voltage Mode				=GND		V
Internal Switch On Resistance	R_{DS_ON}	$V_{DD}=3.7V, I_{OUT}=1.5A$		100		mOhm
Over Current Protect	I_{OCP}	$V_{DD}=3.7V$	2.5			A
Internal Clock Frequency				33		KHz
Operating Temperature	T_{OPR}		-20		+80	°C

■ TYPICAL APPLICATION CIRCUIT



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