

UTC 3414 LINEAR INTEGRATED CIRCUIT

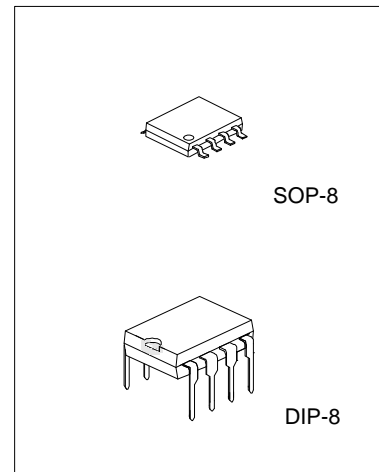
SINGLE-SUPPLY DUAL HIGH CURRENT OPERATIONAL AMPLIFIER

DESCRIPTION

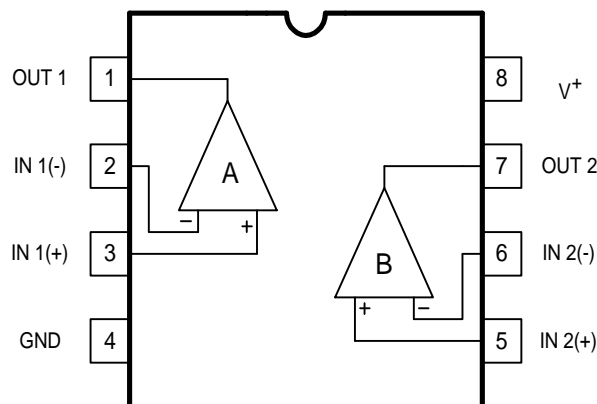
The UTC 3414 integrated circuit is a high gain, high output current, high output voltage swing dual operational amplifier capable of driving 70mA.

FEATURES

- *Single Supply
- *Operating Voltage (+3V~+15V)
- *High Output Current (70mA)
- *Slew Rate (1.0V/ μ s typ.)
- *Bipolar Technology



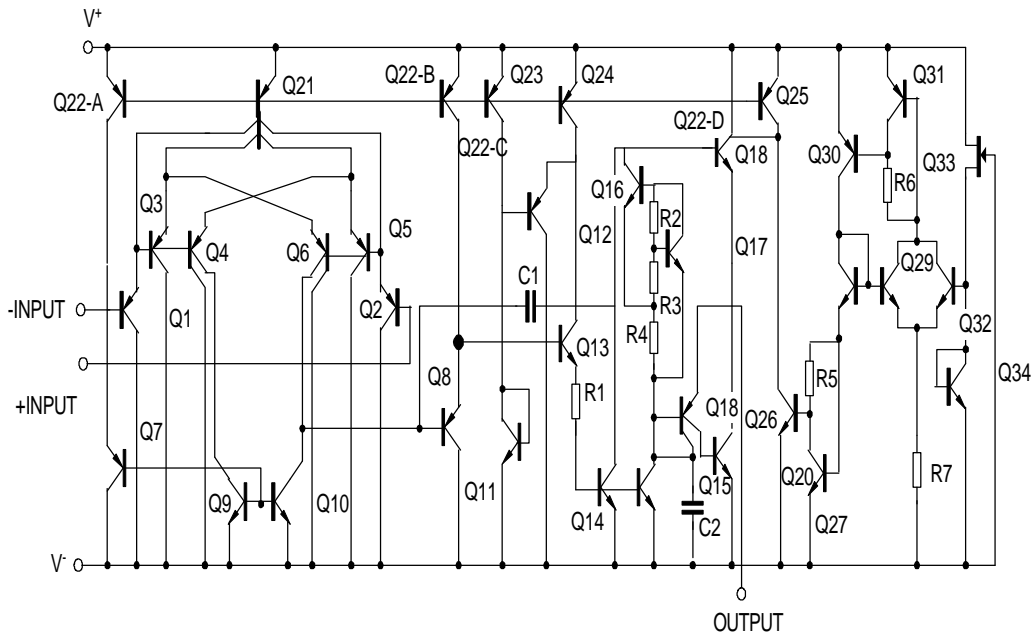
PIN CONFIGURATIONS



UTC3414

LINEAR INTEGRATED CIRCUIT

BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	V+(V+/V-)	15V (or +-7.5)	V
Differential Input Voltage	V _{ID}	15	V
Input Voltage	V _I	-0.3 ~ +15	V
Power Dissipation	P _D	300	mW
Operating Temperature	T _{opr}	-20 to +75	°C
Storage Temperature	T _{stg}	-40 to +125	°C

ELECTRICAL CHARACTERISTICS(Ta=25°C, V⁺=8.6V)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Offset Voltage	V _{IO}	R _s =0Ω		2	5	mV
Input Offset Current	I _{IO}			5	100	nA
Input Bias Current	I _B			100	500	nA
Large Signal Voltage Gain	A _v	R _L =2kΩ	88	100		dB
Input Common Voltage Range	V _{ICM}		V ⁺ -2			V
Maximum Output Voltage Swing 1	V _{OM1}	R _L ≥2kΩ, V ⁺ =5V	3.5			V
Maximum Output Voltage Swing 2	V _{OM2}	I _o =70mA, V ⁺ =5V	3.2			V
Common Mode Rejection Ratio	CMR		80	90		dB

UTC

UNISONIC TECHNOLOGIES CO., LTD.

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QW-R105-009,B

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PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage Rejection Ratio	SVR		80	90		dB
Operating Current	I _{cc}	R _L =∞	3	4	5	mA
Slew Rate	SR			1.0		V/μs
Unity Gain Bandwidth	GB			1.3		MHz
Operating Voltage Range	V ⁺				15	V