



3414

LINEAR INTEGRATED CIRCUIT

SINGLE-SUPPLY DUAL HIGH CURRENT OPERATIONAL AMPLIFIER

DESCRIPTION

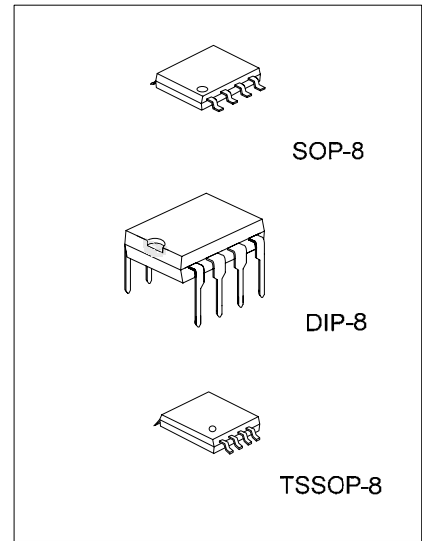
The UTC **3414** integrated circuit is a high gain, high output current, high output voltage swing dual operational amplifier capable of driving 70mA.

FEATURES

- *Single supply
- *Operating voltage (+3V~+15V)
- *High output current (70mA)
- *Slew rate (1.0V/μs typ.)
- *Bipolar technology

ORDERING INFORMATION

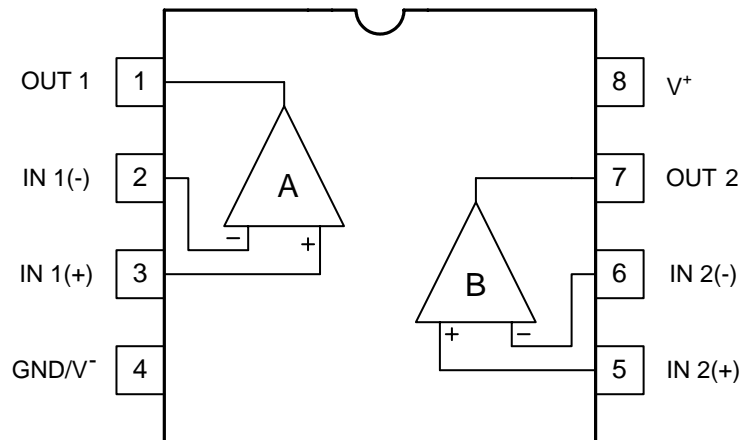
Ordering Number		Package	Packing
Normal	Lead Free Plating		
3414-D08-T	3414L-D08-T	DIP-8	Tube
3414-P08-R	3414L-P08-R	TSSOP-8	Tape Reel
3414-P08-T	3414L-P08-T	TSSOP-8	Tube
3414-S08-R	3414L-S08-R	SOP-8	Tape Reel
3414-S08-T	3414L-S08-T	SOP-8	Tube



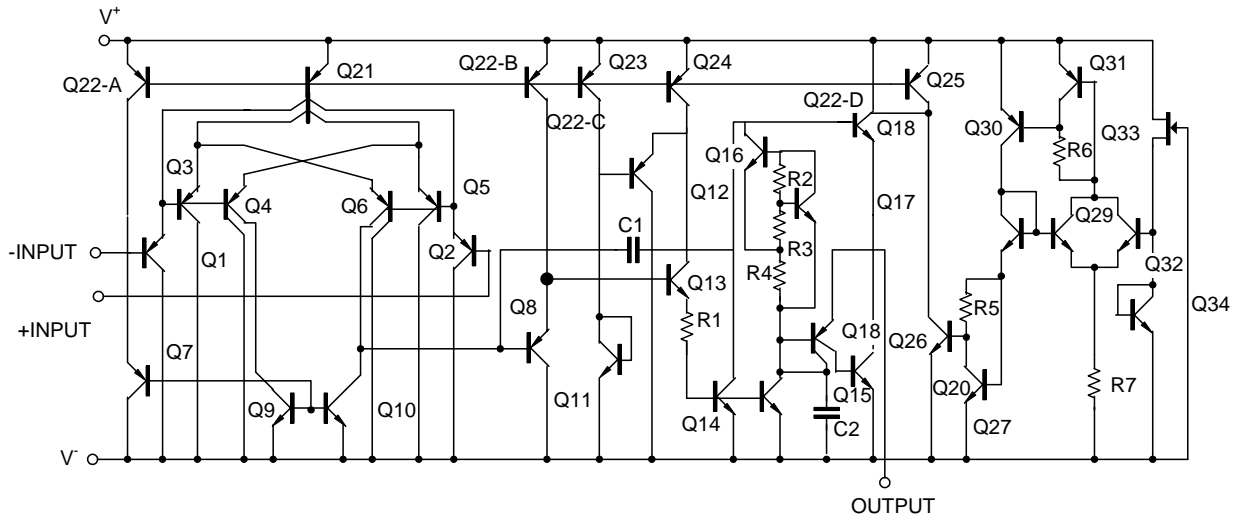
*Pb-free plating product number: 3414L

<p>3414L-D08-T</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating</p>	<p>(1) T: Tube, R: Tape Reel (2) D08: DIP-8, P08: TSSOP-8, S08: SOP-8 (3) L: Lead Free Plating, Blank: Pb/Sn</p>
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■ PIN CONFIGURATION



■ 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 _{I(DIFF)}	15	V
Input Voltage	V _{IN}	-0.3 ~ +15	V
Power Dissipation	P _D	300	mW
Operating Temperature	T _{OPR}	-20 ~ +75	°C
Storage Temperature	T _{STG}	-40 ~ +125	°C

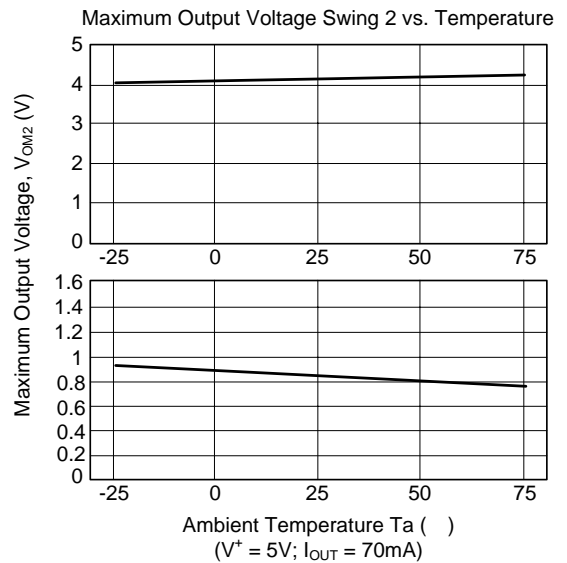
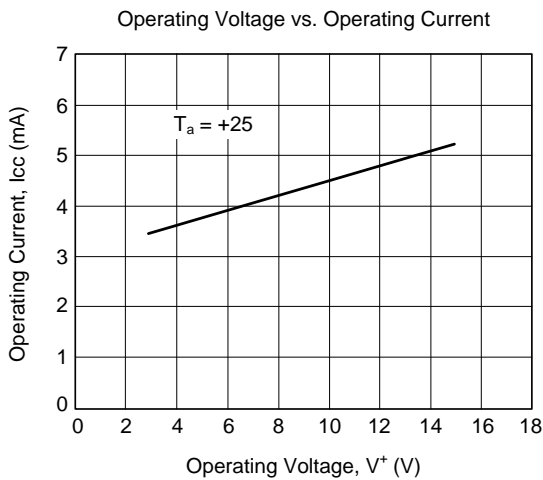
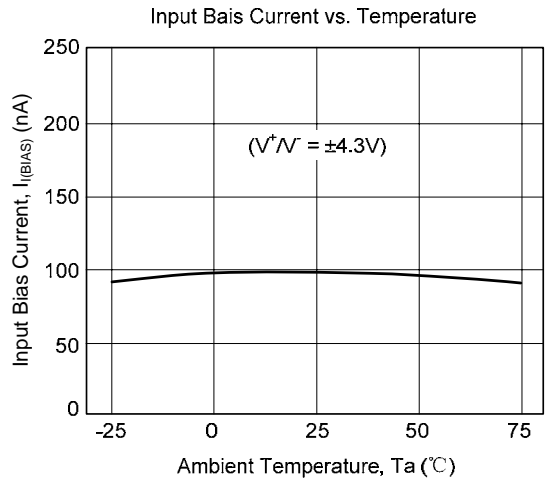
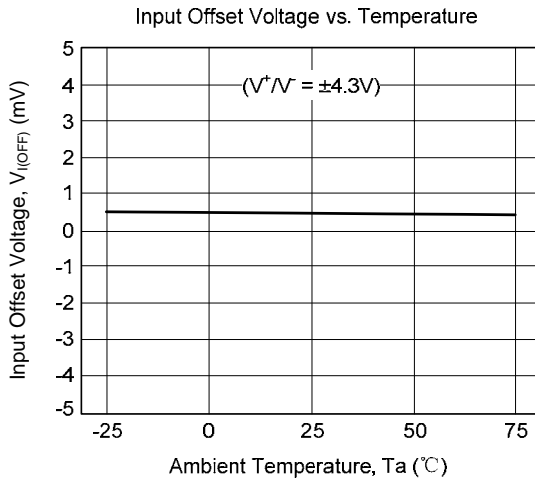
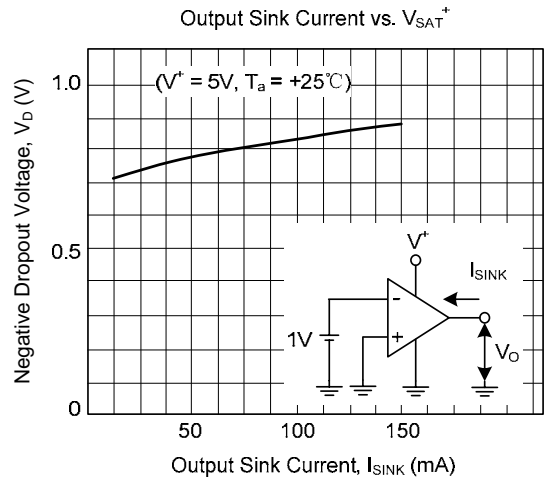
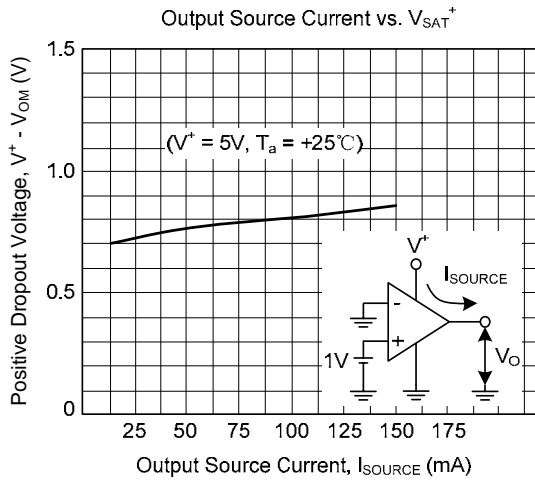
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

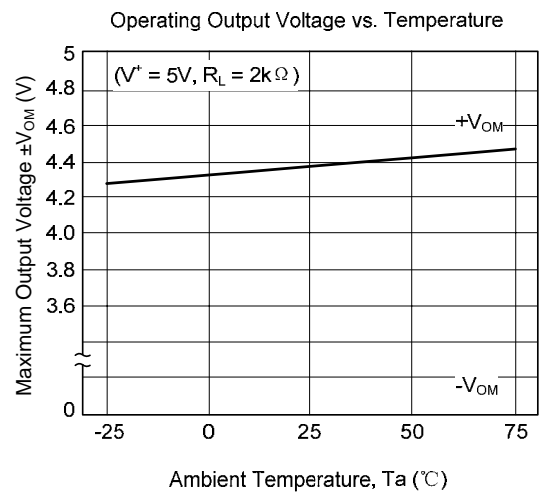
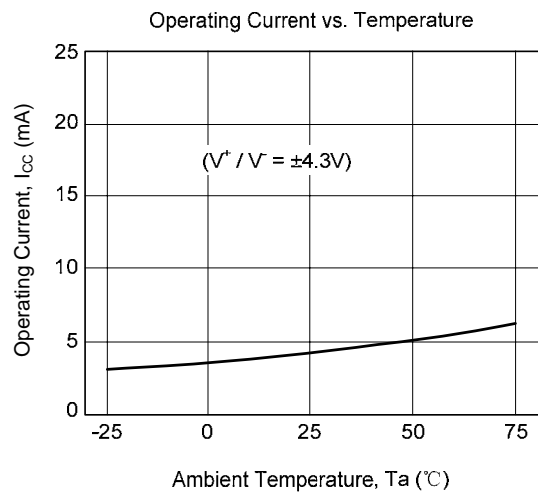
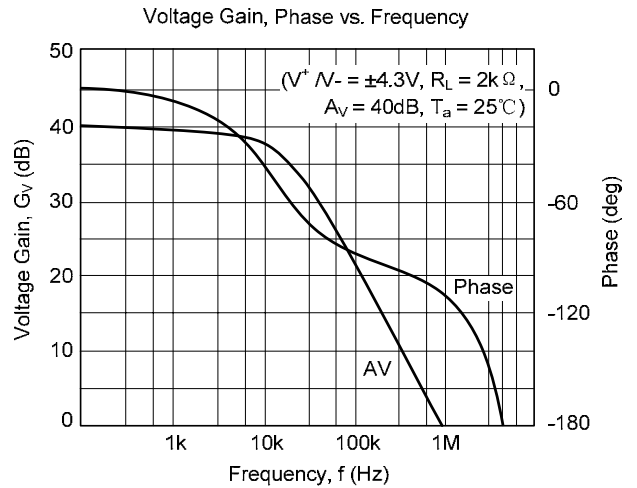
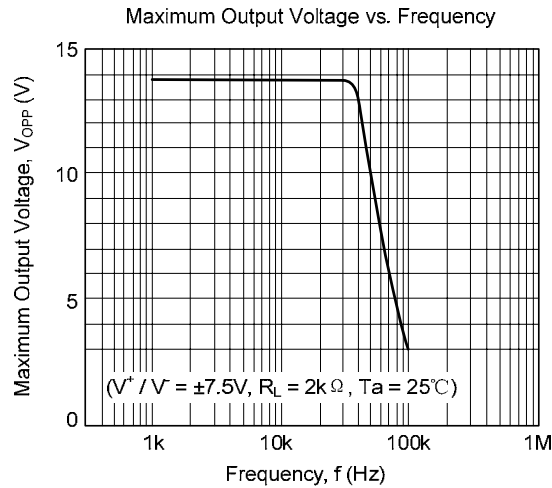
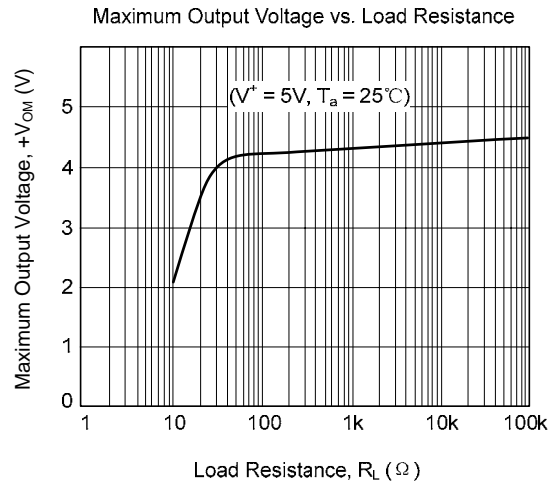
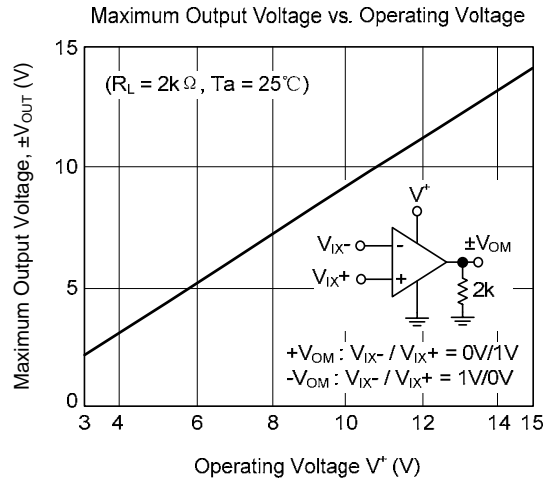
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, V₊=8.6V)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Offset Voltage	V _{I(OFF)}	R _S =0Ω		2	5	mV
Input Offset Current	I _{I(OFF)}			5	100	nA
Input Bias Current	I _{I(BIAS)}			100	500	nA
Large Signal Voltage Gain	G _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 _{OUT} =70mA, V ⁺ =5V	3.2			V
Common Mode Rejection Ratio	CMR		80	90		dB
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

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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