

UTC 3404 LINEAR INTEGRATED CIRCUIT

SINGLE-SUPPLY DUAL OPERATIONAL AMPLIFIER

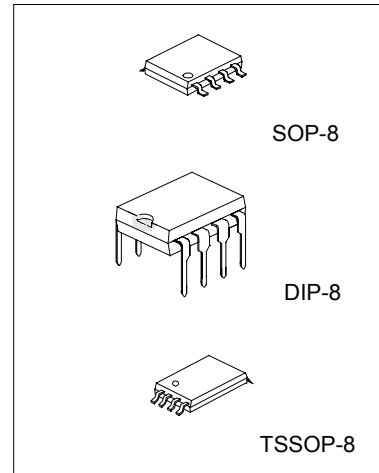
DESCRIPTION

The UTC 3404 is high performance single supply dual operational amplifier.

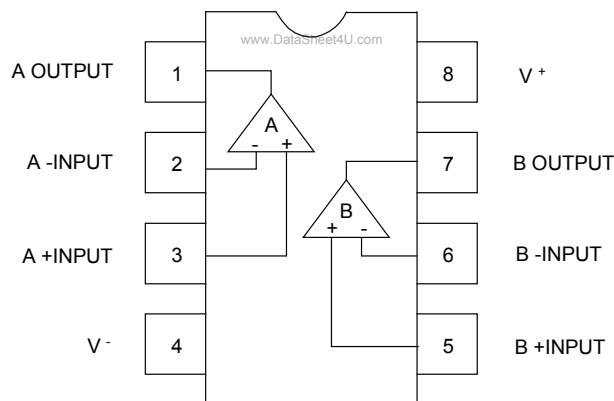
The UTC 3404 is improved version of the UTC M2904 on slew rate & cross-over distortion.

FEATURES

- *Single Supply
- *Operating Voltage: +4V~+36V
- *Low Operating Current: 2.0mA (typ.)
- *Slew Rate: 1.2V/ μ s (typ.)



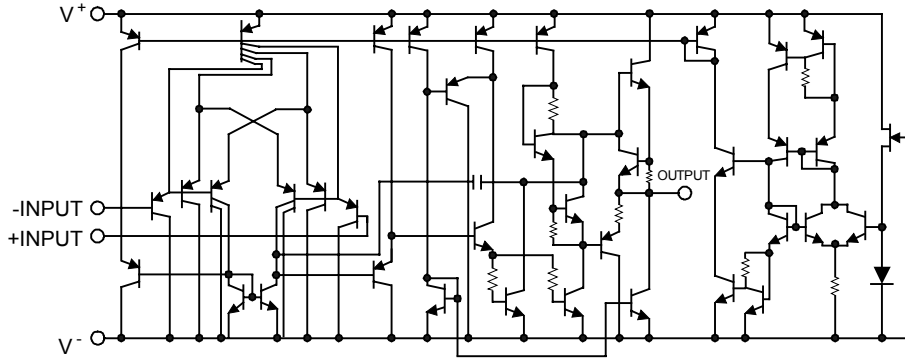
PIN CONFIGURATION



UTC 3404

LINEAR INTEGRATED CIRCUIT

EQUIVALENT CIRCUIT (1/2 SHOWN)



ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Supply Voltage	$V^+(V^+/V^-)$	36V (or±18)	V
Differential Input Voltage	V_{ID}	36	V
Input Voltage	V_{IC}	-0.3 ~ 36	V
Power Dissipation			
DIP8	P_D	500	mW
SOP8		300	
TSSOP8		250	
Operating Temperature Range	T_{opr}	-40 ~ +85	°C
Storage Temperature Range	T_{stg}	-40 ~ +125	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C, $V^+/V^- = \pm 15V$)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Input Offset Voltage	V_{IO}	$R_s=0\Omega$		2	5	mV
Input Offset Current	I_{IO}			5	50	nA
Input Bias Current	I_B			70	200	nA
Large Signal Voltage Gain	A_v	$R_L > 2K\Omega$	88	100		dB
Maximum Output Voltage Swing	V_{OM}	$R_L=2K\Omega$	±13	±14		V
Input Common Mode Voltage Range	V_{ICM}		-15 ~ +13			V
Common Mode Rejection Ratio	CMR	DC	70	90		dB
Supply Voltage Rejection Ratio	SVR		80	94		dB
Operating Current	I_{CC}	$R_L=\infty$		2.0	3.5	mA
Output Source Current	I_{SOURCE}	$V_{IN^+}=1V, V_{IN^-}=0V$	20	30		mA
Output Sink Current	I_{SINK}	$V_{IN^+}=0V, V_{IN^-}=1V$	10	20		mA
Slew Rate	SR			1.2		V/μs
Unity Gain Bandwidth	f_T			1.2		MHz

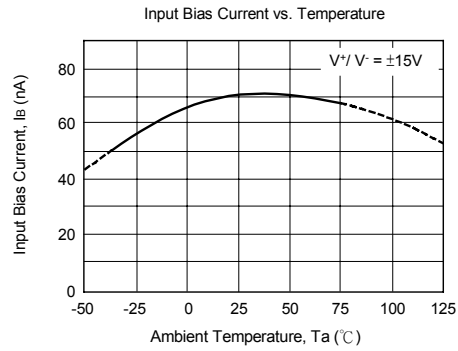
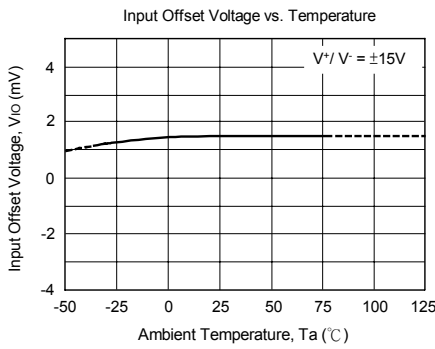
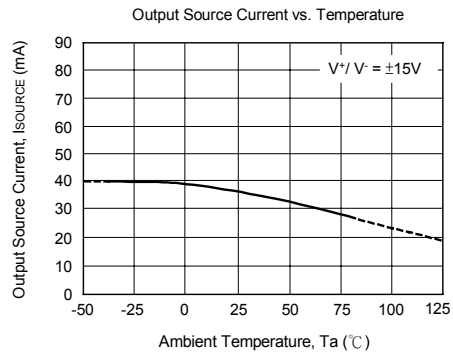
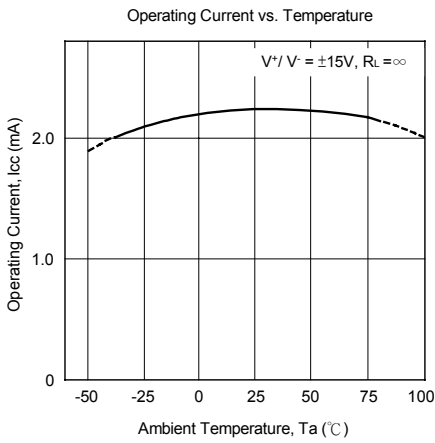
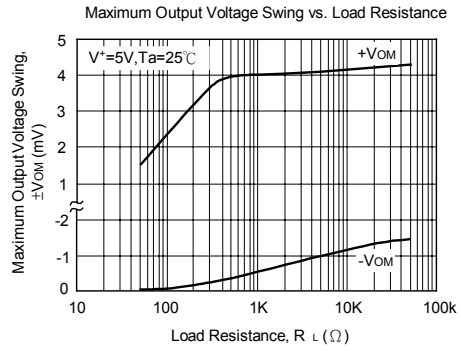
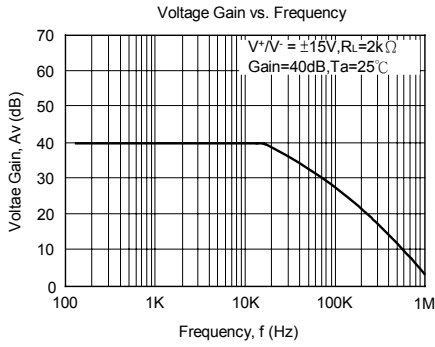
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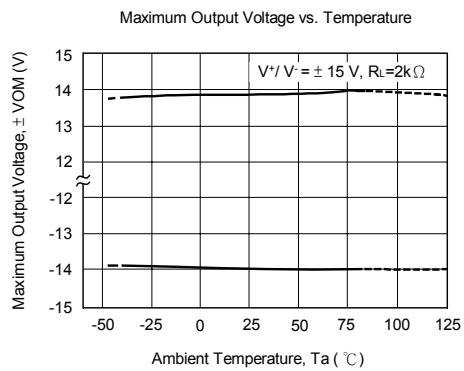
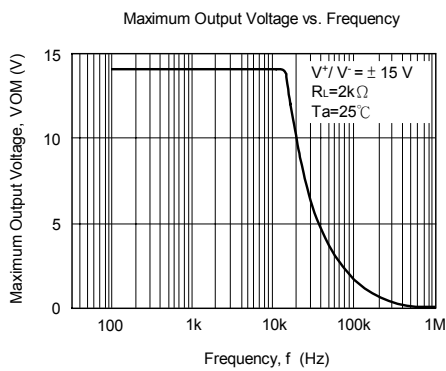
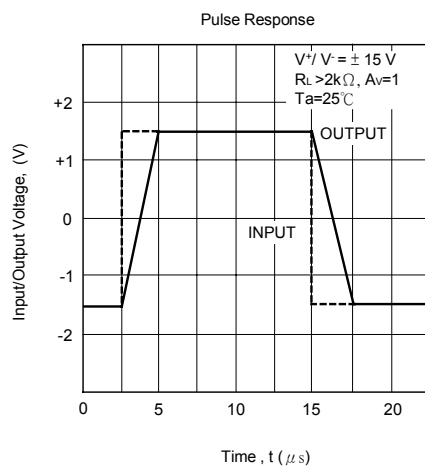
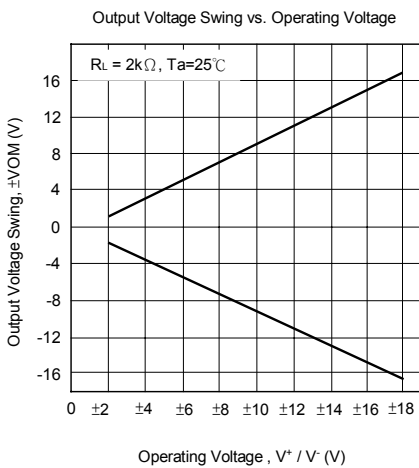
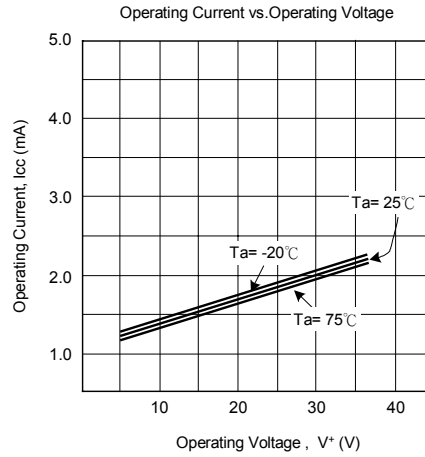
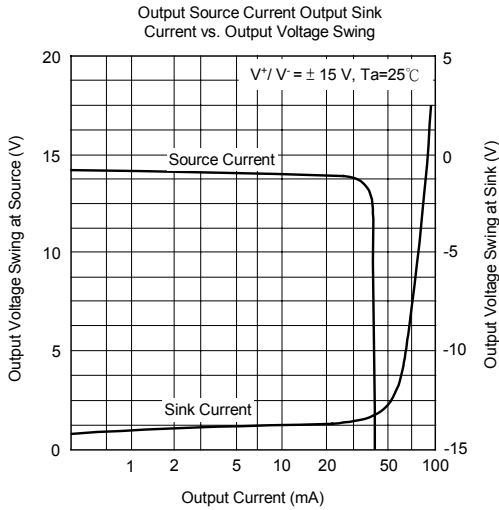
UNISONIC TECHNOLOGIES CO., LTD.

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TYPICAL CHARACTERISTICS

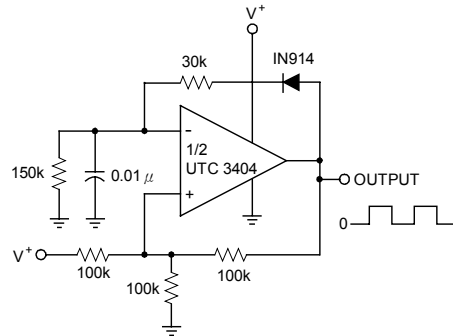




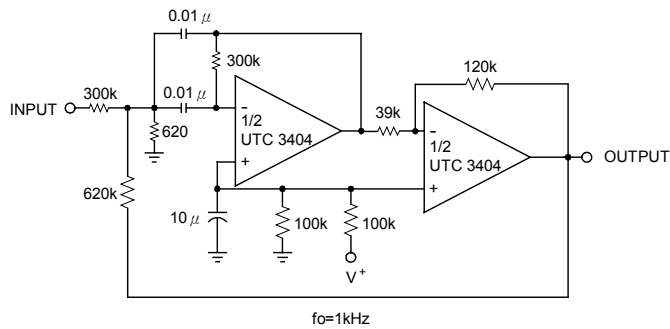
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TYPICAL APPLICATIONS



Square Wave Oscillator



Bandpass Filter

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