

TA8464K

DUAL POWER OPERATIONAL AMPLIFIER

The TA8464K is a dual power operational amplifier with the output current 1.2A (PEAK).

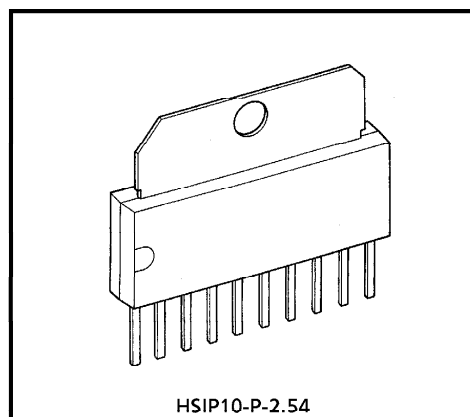
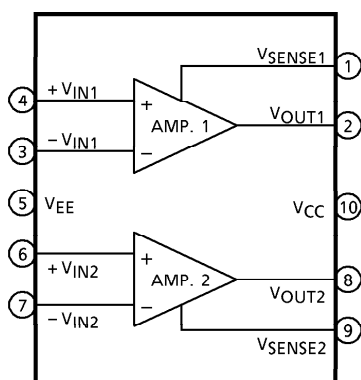
This amplifier is usable for CD player arm driver, brushed motor forward/reverse rotation control driver, and FDD/HDD voice coil motor.

Furthermore, this amplifier is best suited for LDP focus tracking actuator driver because of its high through rate.

FEATURES

- Provided with a Current Limiter.
- High Output Current : I_O (PEAK) = 1.2A
- Internal Phase Compensation Type.
- Less Crosstalk : C_T = 55dB (Typ.)
- High Slew Rate : SR = 1.0V / μs (Typ.)

BLOCK DIAGRAM



Weight : 2.47g (Typ.)

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PIN FUNCTION

PIN No.	SYMBOL	FUNCTIONAL DESCRIPTION
1	V _{SENSE1}	AMP. 1 output current detective terminal
2	V _{OUT1}	AMP. 1 output terminal
3	-V _{IN1}	AMP. 1 input terminal (-)
4	+V _{IN1}	AMP. 1 input terminal (+)
5	V _{EE}	Negative-side voltage supply terminal
6	+V _{IN2}	AMP. 2 input terminal (+)
7	-V _{IN2}	AMP. 2 input terminal (-)
8	V _{OUT2}	AMP. 2 output terminal
9	V _{SENSE2}	AMP. 2 output current detective terminal
10	V _{CC}	Positive-side voltage supply terminal

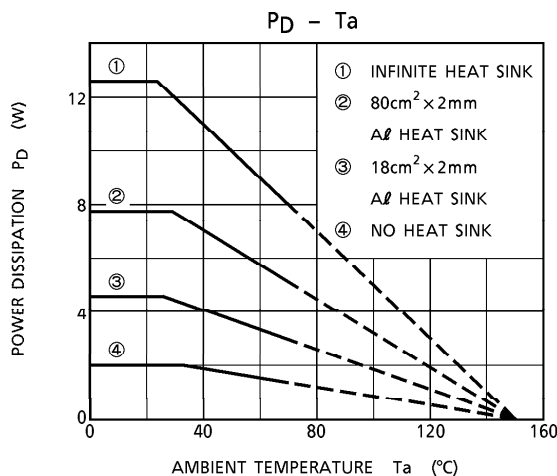
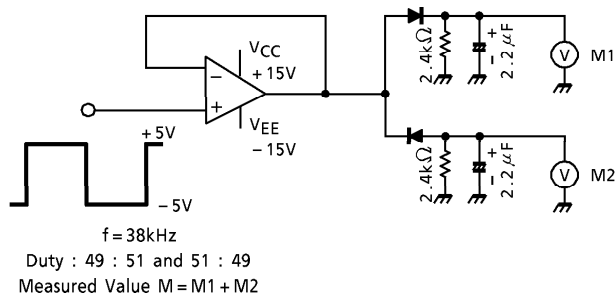
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Supply Voltage	V _{CC} , V _{EE}	± 18	V
Output Current	I _O (PEAK)	1.2	A
Power Dissipation	P _D	12.5 (Note)	W
Operating Temperature	T _{opr}	- 30~75	°C
Storage Temperature	T _{stg}	- 55~150	°C

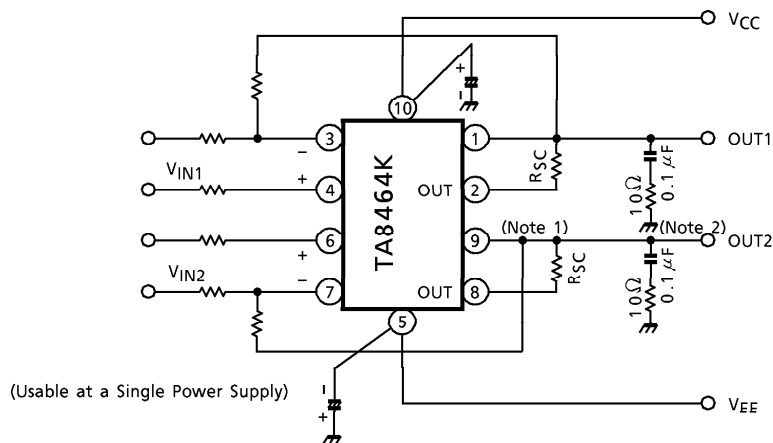
(Note) T_c = 25°CELECTRICAL CHARACTERISTICS (Unless otherwise specified, V_{CC} = 15V, V_{EE} = - 15V, Ta = 25°C)

CHARACTERISTIC		SYM-BOL	TEST CIR-CUIT	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current		I _{CC}	—	—	—	17	25	mA
Input Offset Current		I _{IO}	—	—	—	3	100	nA
Input Bias Current		I _I	—	—	—	98	300	nA
Input Offset Voltage		V _{IO}	—	—	—	0	7	mV
Maximum Output Voltage	Upper	V _{OH}	—	V _{CC} = ± 15V, I _O = 300mA	12.2	13.3	—	V
	Lower	V _{OL}	—		- 12.2	- 13.3	—	
	Upper	V _{OH}	—	V _{CC} = ± 6V, I _O = 1A	2.0	3.9	—	V
	Lower	V _{OL}	—		- 2.0	- 4.0	—	
Open Loop Gain		G _{VO}	—	—	—	80	—	dB
Input Common Mode Voltage Range		CMR	—	—	± 13	± 14	—	V
Common Mode Rejection Ratio		CMRR	—	V _{IN} = - 10~10V	90	113	—	dB
Supply Voltage Rejection Ratio		SVRR	—	V _{CC} = - V _{EE} = 6~15V ± 1V	—	65	100	μV/V
Slew Rate		SR	—	—	—	1.0	—	V / μs
Output Limiting Current		I _{SC}	—	R _{SC} = 0.68Ω	0.8	1.0	—	A
Crosstalk		C _T	—	V _{IN} = - 14~14V	—	55	—	dB
Slew Rate Symmetry		SR'	1	INPUT : Duty (49 : 51 / 51 : 49) Square wave	—	0.02	1.0	V

TEST CIRCUIT 1 Slew rate, symmetry SR'



APPLICATION CIRCUIT 1

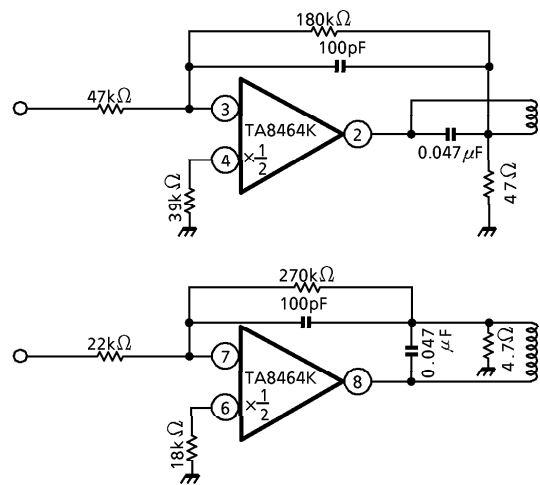


(Note 1) $I_{SC} \doteq \frac{0.7 \text{ (V)}}{R_{SC} \text{ (}\Omega\text{)}} \text{ (A)}$

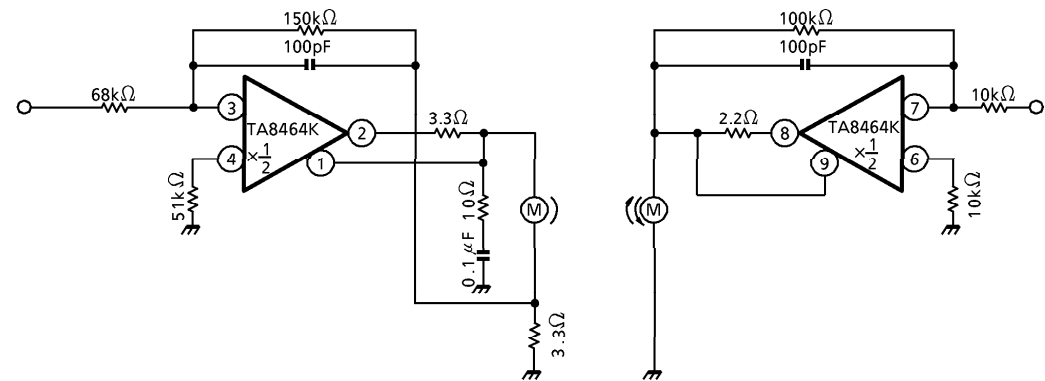
(Note 2) If crosstalk is recognizable remarkably in applications above 80kHz, change a capacitor to one having a value of about $0.33\mu\text{F}$ as a compensating circuit. Further, no resistor is needed in this case.

(Note 3) Utmost care is necessary in the design of the output line, V_{CC} and GND line since IC may be destroyed due to short-circuit between outputs, air contamination fault, or fault by improper grounding.

APPLICATION CIRCUIT 2



APPLICATION CIRCUIT 3



HSIP10-P-2.54

Technical drawing of a 10-pin connector with dimensions in millimeters. The drawing includes a top view, a side view, and a cross-sectional view.

Top View Dimensions:

- Overall width: 22.0 ± 0.2
- Pin pitch: 2.54
- Pin diameter: $\varnothing 3.2 \pm 0.2$
- Pin length: 1.82 TYP
- Pin thickness: 0.5 ± 0.1
- Pin hole diameter: $\varnothing 0.25 \text{ (M)}$
- Pin spacing: 1.2 ± 0.1
- Pin thickness: 0.5 ± 0.2
- Pin thickness: 8.5 ± 0.3
- Pin thickness: 12.5 ± 0.3
- Pin thickness: 15.0 ± 0.3
- Pin thickness: 5.5 ± 0.3

Side View Dimensions:

- Overall width: 4.0 ± 0.2
- Pin thickness: $0.4 \text{ }^{+0.1}_{-0.05}$

Cross-sectional View Dimensions:

- Pin thickness: 0.6 ± 0.1
- Pin length: 2.5 TYP
- Pin length: 3.0 TYP

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