

TA8464K

DUAL POWER OPERATIONAL AMPLIFIER

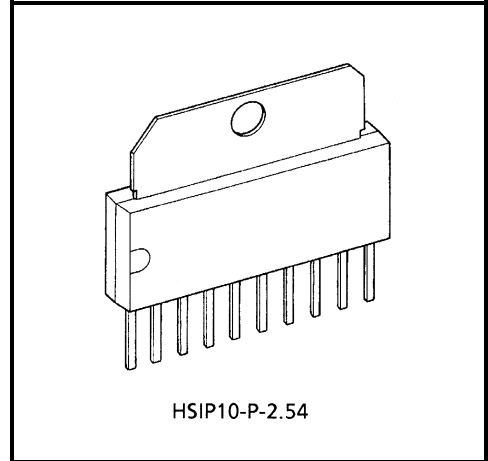
The TA8464K is a dual power operational amplifier with the output current 1.2 A (PEAK).

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.

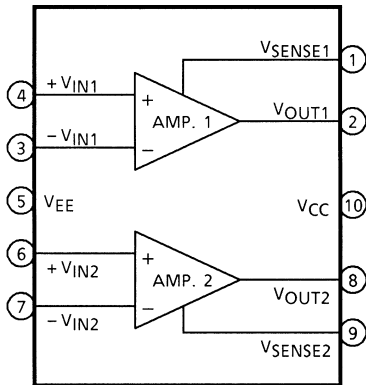
FEATURES

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



Weight: 2.47 g (Typ.)

BLOCK DIAGRAM



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°C

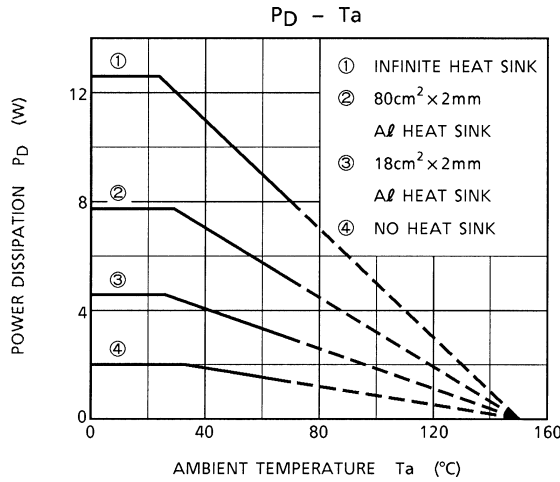
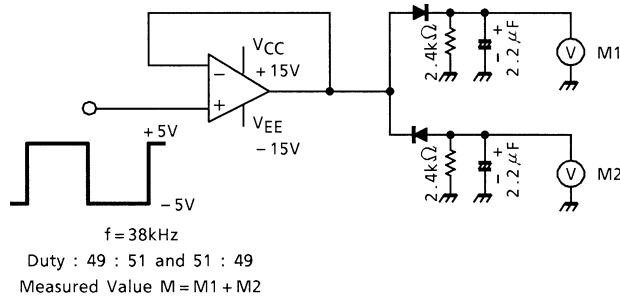
ELECTRICAL CHARACTERISTICS

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

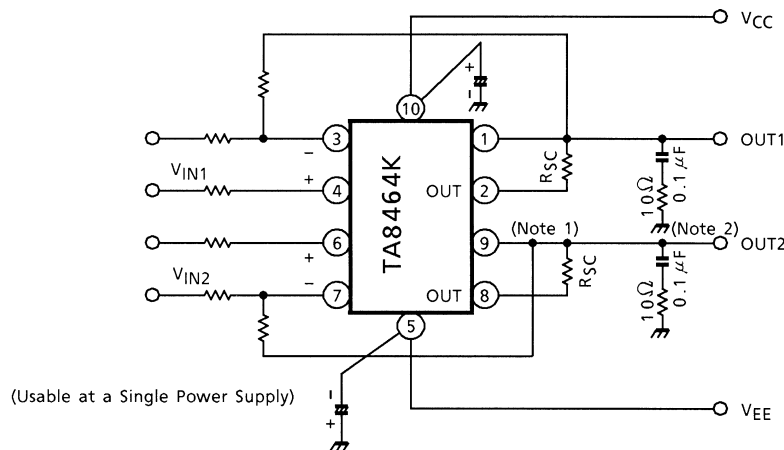
CHARACTERISTIC	SYMBOL	TEST CIRCUIT	TEST CONDITION	MIN	TYP.	MAX	UNIT
Supply Current	I _{CC}	—	—	—	17	25	mA
Input Offset Current	I _{IO}	—	—	—	3	100	nA
Input Bias Current	I _I	—	—	—	98	300	nA
Input Offset Voltage	V _{IO}	—	—	—	0	7	mV
Maximum Output Voltage	Upper	V _{OH}	V _{CC} = ±15 V, I _O = 300 mA	12.2	13.3	—	V
	Lower	V _{OL}		-12.2	-13.3	—	
	Upper	V _{OH}	V _{CC} = ±6 V, I _O = 1 A	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} = -10~10 V	90	113	—	dB
Supply Voltage Rejection Ratio	SVRR	—	V _{CC} = -V _{EE} = 6~15 V±1 V	—	65	100	μV / V
Slew Rate	SR	—	—	—	1.0	—	V / μs
Output Limiting Current	I _{SC}	—	R _{SC} = 0.68 Ω	0.8	1.0	—	A
Crosstalk	C _T	—	V _{IN} = -14~14 V	—	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

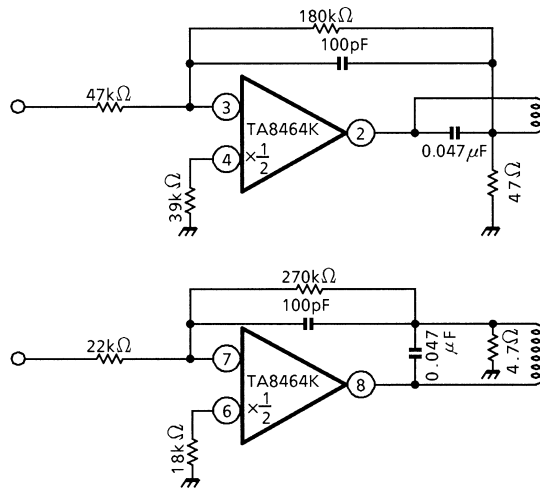


Note 1: $I_{SC} \approx \frac{0.7(V)}{R_{SC}(\Omega)} (A)$

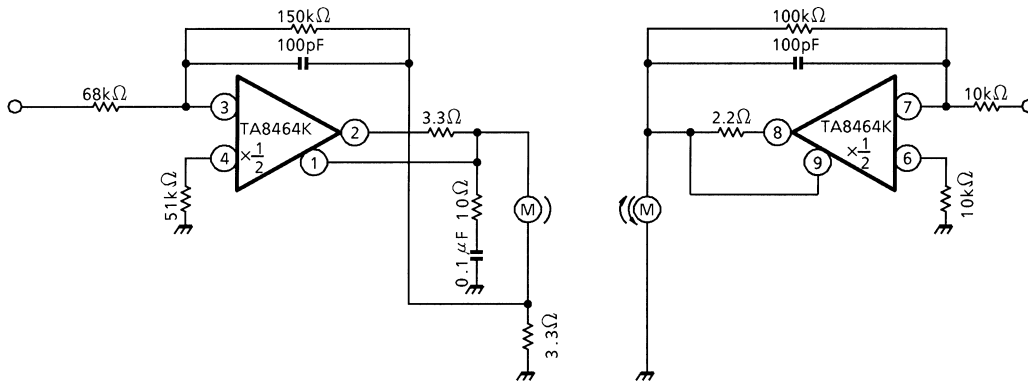
Note 2: If crosstalk is recognizable remarkably in applications above 80 kHz, change a capacitor to one having a value of about $0.33\mu\text{F}$ as a compensating circuit. Further, no resistor is needed in this case.

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



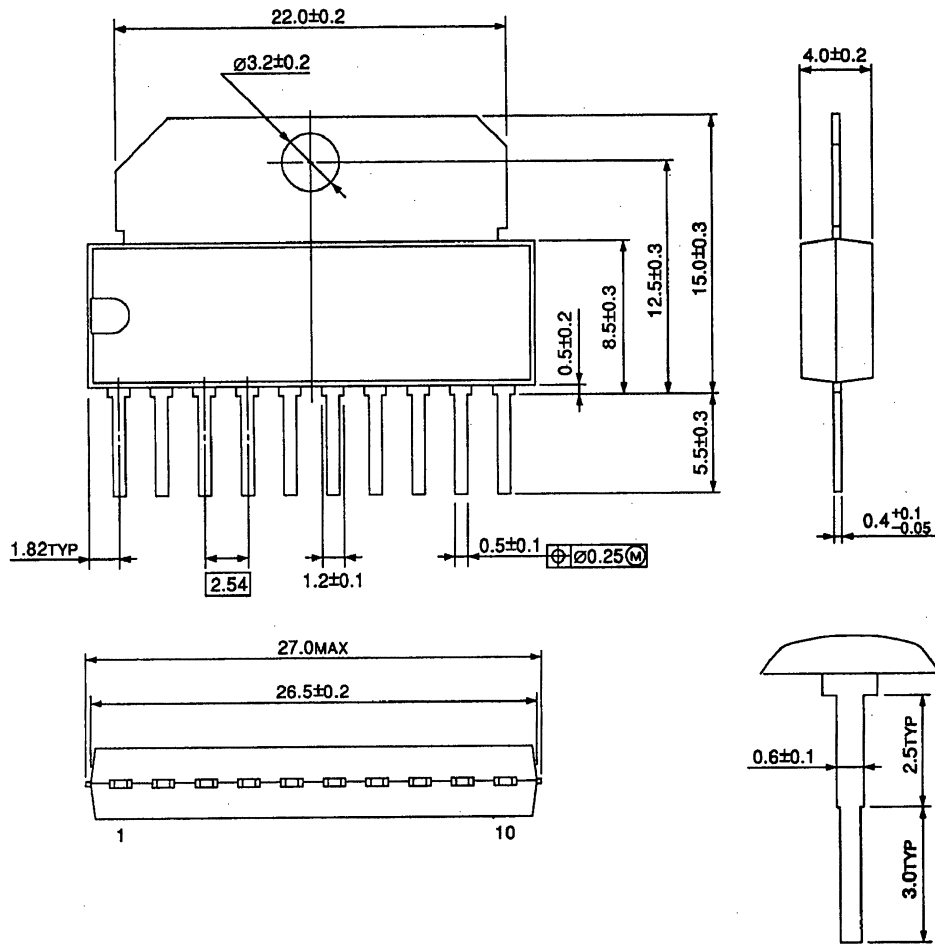
APPLICATION CIRCUIT 3



PACKAGE DIMENSIONS

HSIP10-P-2.54

Unit : mm



Weight : 2.47 g (Typ.)

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