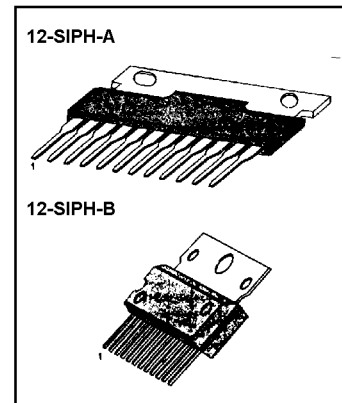


INTRODUCTION

The KA9257, a monolithic integrated circuit, is a dual power operational amplifier with a maximum output current of 0.5A. Since it consists of a balance transless, both forward and reverse operation of the motor can be achieved on a single power source. The device is suitable for a CD player.

FEATURES

- 2 channel BTL driver
- Low input bias (I_{ib} = 30nA)
- Built in phase compensation capacitor
- Housed in a 12SIP H/S package for easy heat discharge
- Improved crosstalk: (CT = 80dB)
- High output current: (I_o = 0.5A)



ORDERING INFORMATION

Device	Package	Operating Temperature
KA9257	12-SIPH-A	-25°C ~ +75°C
KA9257S	12-SIPH-B	

BLOCK DIAGRAM

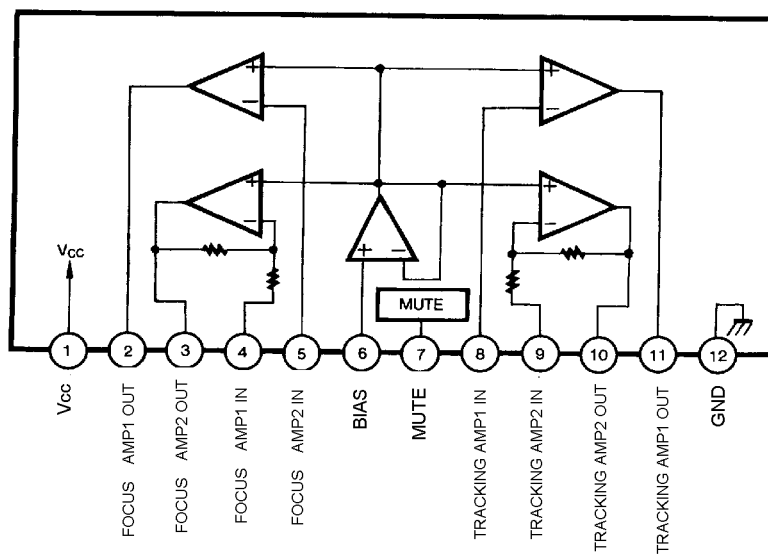


Fig. 1

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	18	V
Power Dissipation	P_D	15	W
Operating Temperature	T_{OPR}	- 25 ~ + 75	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ + 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

 ($T_a = 25^\circ\text{C}$, $V_{CC} = 12\text{V}$, $f = 1\text{KHz}$, $R_L = 4\text{ohm}$, unless otherwise specified)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Circuit Current	I_{CCQ}	$V_I = 0$	-	3	10	mA
Input Bias Current	I_{BIAS1}	$V_I = 0$	-	30	100	nA
Input Bias Pin Current	I_{BIAS2}	$V_I = 0$	-	100	300	nA
Output Offset Voltage	V_{OO}	$V_I = 0$	-50	0	50	mV
Maximum Source Current	I_{SOURCE}	$R_L = 4\text{ohm}$, $V_O = \text{GND}$	0.7	1.4	-	A
Maximum Sink Current	I_{SINK}	$R_L = 4\text{ohm}$, $V_O = V_{CC}$	0.4	0.8	-	A
Maximum Output Voltage	$V_{O(MAX)}$	$V_I = 2\text{Vrms}$	1.8	2.5	-	V_{rms}
Closed Loop Voltage Gain	G_{VC}	$V_I = 0.1\text{Vrms}$	5.0	6.0	7.0	dB
Cut-off Frequency	f_T	$V_I = 0.1\text{Vrms}$, 3dB Down	15	20	-	KHz
Cross-Talk	CT	$V_I = 0.1\text{Vrms}$, BPF: 20-20KHz	40	80	-	dB
Ripple Rejection Ratio	RR	$V_{RR} = 0.1\text{Vrms}$, $F_{RR} = 120\text{Hz}$	30	40	-	dB
Slew-Rate	SR	$V_I = 0.3\text{V}_{pp}$ Squarwave	-	0.3	-	$\text{V}/\mu\text{S}$

TEST CIRCUIT

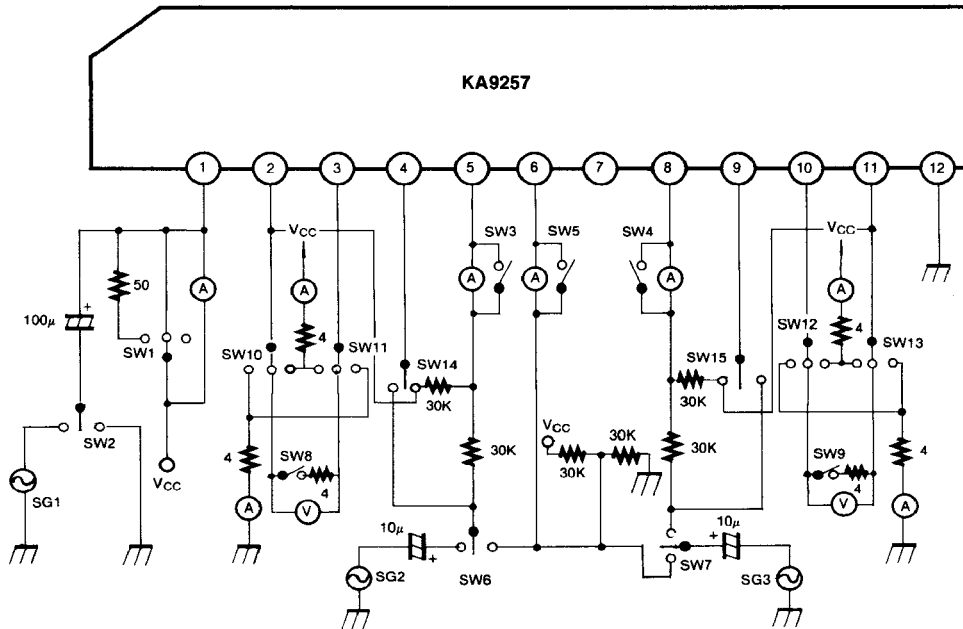


Fig. 2

APPLICATION CIRCUIT

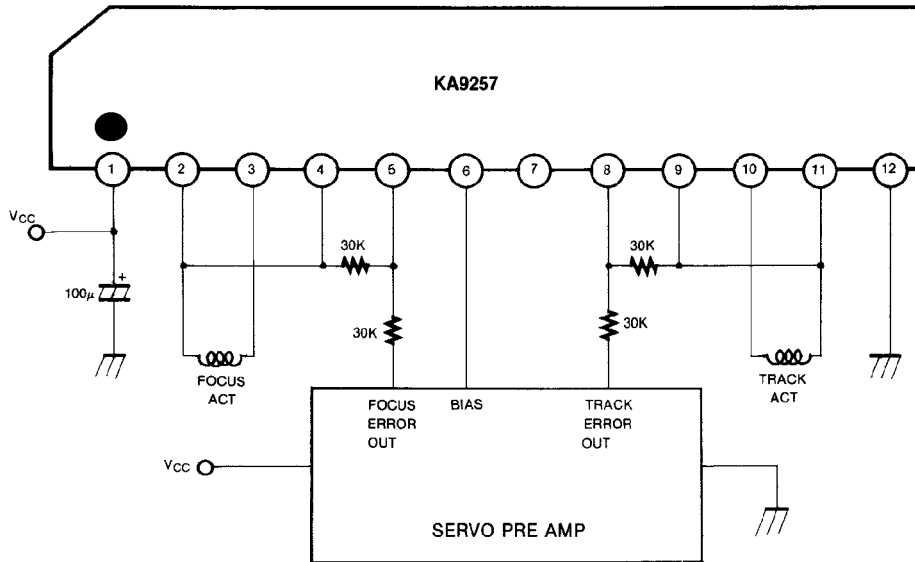


Fig. 3

Precautions

1. In designing the board, a minimum of 6cms of segregation should be allowed between the motor drive IC (KA9257) and other components such as the micom and/or Recorder/Player Ics.
2. To get a stable supply of voltage and radiation shield effect, the CD Deck needs to be grounded.

Dimensions in Millimeters

