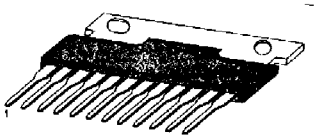
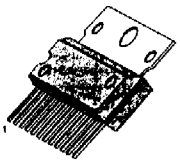
INTRODUCTION

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.

12-SIPH-A



12-SIPH-B



FEATURES

- 2 channel BTL driver
- Low input bias (Iib =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℃~+75℃
KA9257S	12-SIPH-B	

BLOCK DIAGRAM

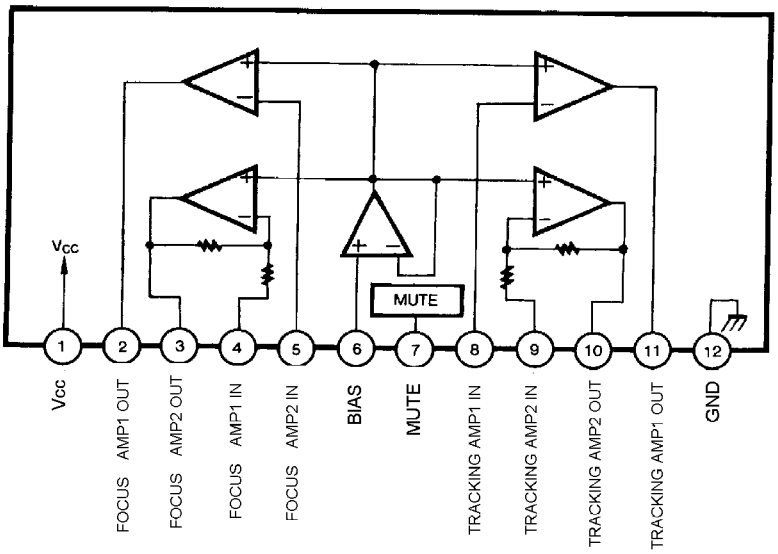


Fig. 1

ABSOLUTE MAXIMUM RATINGS (Ta = 25℃)

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

ELECTRICAL CHARACTERISTICS

(Ta = 25℃, V_{CC} = 12V, f = 1KHz, R_L = 4ohm, 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	$I_{BIAS\,1}$	V_I = 0	-	30	100	nA
Input Bias Pin Current	$I_{BIAS\,2}$	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 = 4ohm, V_O = GND	0.7	1.4	-	A
Maximum Sink Current	I_{SINK}	R_L =4ohm, V_O = V_{CC}	0.4	0.8	-	A
Maximum Output Voltage	$V_{O\,(MAX)}$	V_I = 2Vrms	1.8	2.5	-	V_{rms}
Closed Loop Voltage Gain	G_{VC}	V_I = 0.1Vrms	5.0	6.0	7.0	dB
Cut-off Frequency	f_T	V_I = 0.1Vrms, 3dB Down	15	20	-	KHz
Cross-Talk	CT	V_I = 0.1Vrms, BPF: 20-20KHz	40	80	-	dB
Ripple Rejection Ratio	RR	V_{RR} = 0.1Vrms F_{RR} = 120Hz	30	40	-	dB
Slew-Rate	SR	V_I = 0.3V_{PP} Squarwave	-	0.3	-	V/μS

TEST CIRCUIT

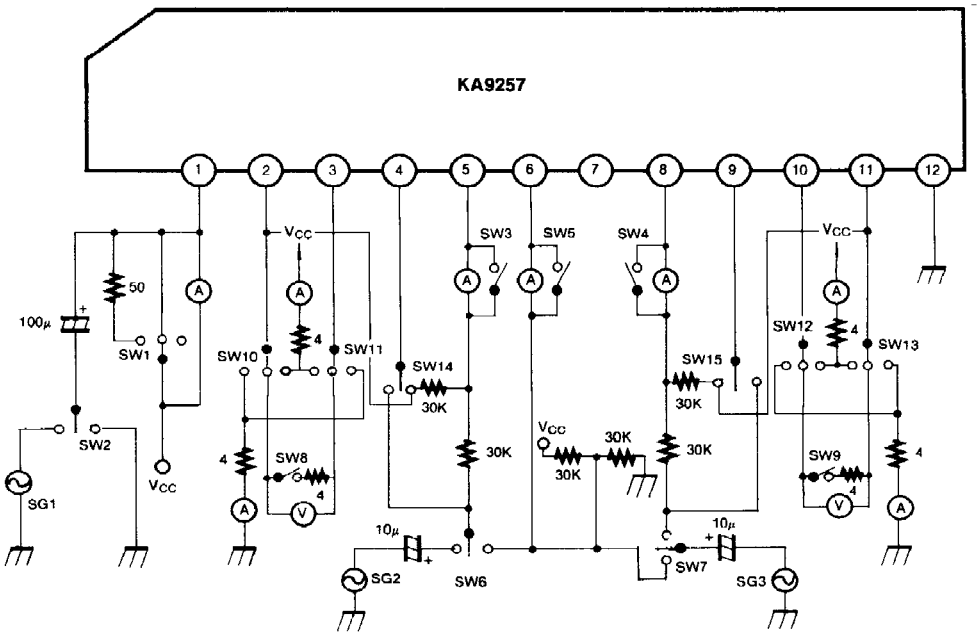


Fig. 2

APPLICATION CIRCUIT

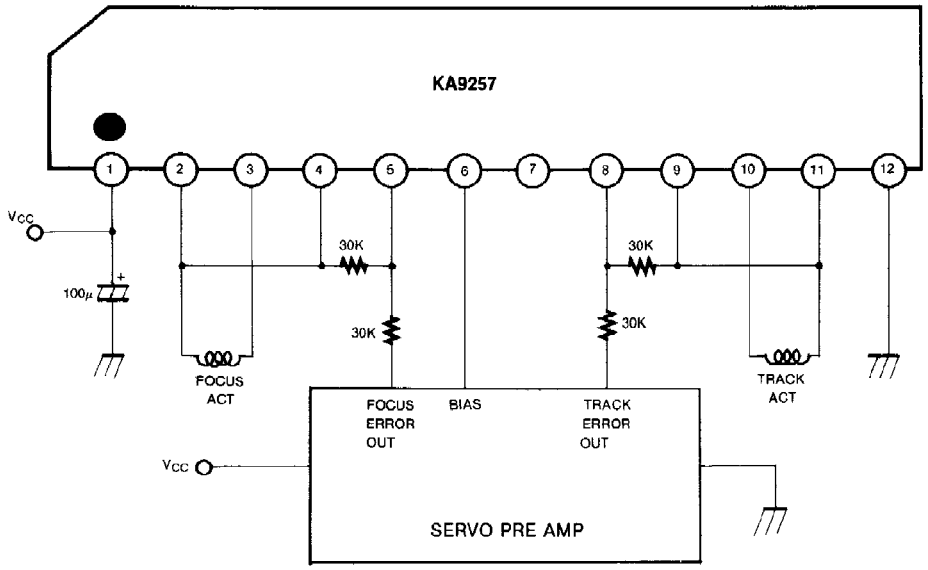


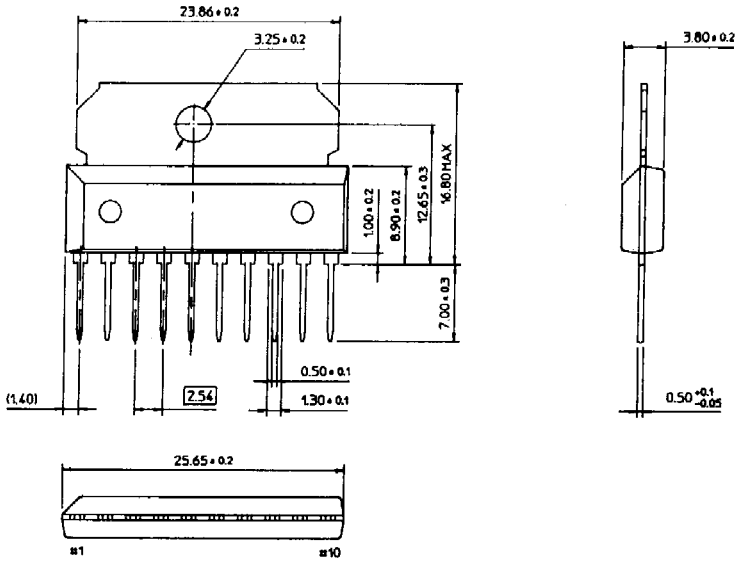
Fig. 3

Precautions

1. In desgning 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 Milimeters

10-SIPH-A



12-SIPH-B