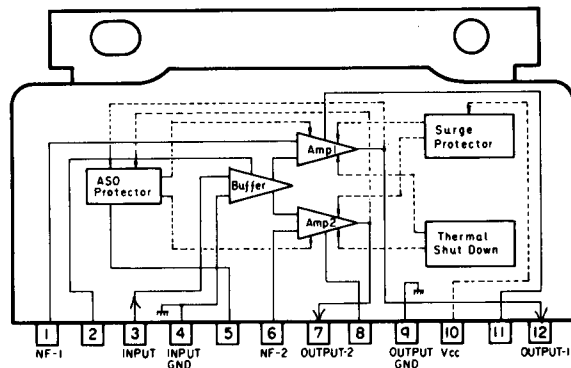


HA 13887

APPLICATION	POWER IC	NAME	PA3005
MODEL	GM-4	TYPE	SILICONE MONOLITHIC BIPOLAR LINEAR IC

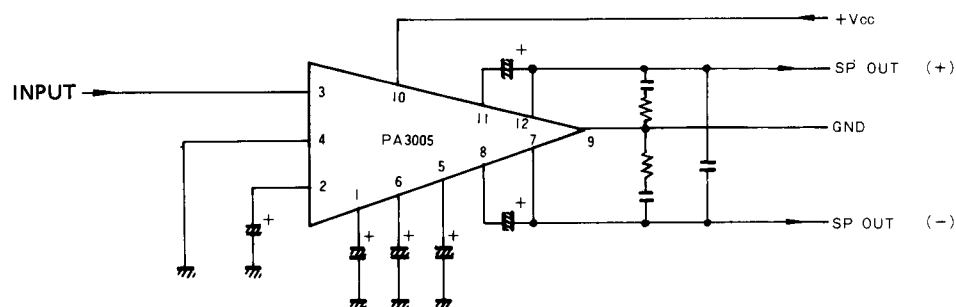
BLOCK DIAGRAM



PIN FUNCTIONS

Pin No.	Standard Voltage (V)	Function and Operation
1	1.9	NF
2	3.5	de-coupling
3	0	Input
4	0	GND
5	1.4	ASO protection circuit time constant
6	1.9	NF
7	6.9	Output (reverse phase)
8	13.1	Boot Strap
9	0	GND
10	13.7	+Vcc
11	13.1	Boot Strap
12	6.9	Output (forward phase)

CONNECTION DIAGRAM



Pin No.	Pin Name	Standard Voltage (V)	I/O	Function and Operation
8	OUT-2	→	OUT	Drives the base of the forward motor drive transistor. PLAY mode: 2.5 ~ 4V; MS, FF, REW Modes: 2.5 ~ 4.8V
9	MSJP-2	→	IN	Forward motor STOP input Motor STOP Mode: 0V Motor RUNNING mode: 0.7 ~ 0.8V
10	NF-E	→	OUT	MUSIC signal amp output. When no MUSIC, approximately 3V constant voltage, when MUSIC, an amplified waveform centered about 3V appears.
11	⊖ E	Approx 3V	IN	Music search MUSIC signal amp input.
12	VDD			Power supply.
13	⊖ P	Approx 3V	IN	END SENSING amp input.
14	NF-P	→	OUT	END SENSING amp output. When the forward & reverse motor stopped, a constant voltage of approximately 3V appears. When both motors or one motor is rotating, a motor ripple voltage amplified waveform appears centered about 3V.
15	PS	→	OUT	END SENSING Schmitt circuit output. When one motor is rotating, an "H" level approximately 6V, "L" level approximately 0V pulse waveform is generated in synchronization with the motor ripple voltage. When both motors are stopped, this pin becomes "H" level
16	ES	→	OUT	MUSIC SENSING schmitt circuit. When music sensed in the PLAY and MS modes, an "H" level approximately 6V, "L" level approximately 0V pulse waveform is generated in synchronization with the music signal. (In all other cases, this pin becomes "H" level.
17	EJT	Normally 0V	OUT	EJECT output when motor races in the PLAY mode. A constant current is output when the motor races in the PLAY mode.
18	\bar{P}	→	IN	PLAY mode switching input. Approx 0V in the PLAY mode. Approx 10V in other modes.
19	PLAY ADJ-1	→		Functions and operation are the same as those of pin 7. Corresponds to the reverse motor.
20	MSTP-1	→	IN	Reverse motor stop input. Voltage is the same as that of pin 9.
21	OUT-1	→	OUT	Corresponds to the reverse motor. Functions and operation are the same as those of pin 8.
22	CD-1	→	OUT	Corresponds to the reverse motor. Functions and operation are the same as those of pin 6.
23	(-) 1	→	IN	Corresponds to the reverse motor. Functions and operation are the same as those of pin 5.
24	(+) 1	→	IN	Corresponds to the reverse motor. Functions and operation are the same as those of pin 4.