

TOY RADIO CONTROL ACTUATOR

The KA2304 is a monolithic integrated circuit designed for remote controlled 2 function (Forward, Backward) actuators.
It is suitable for radio controlled toy car and other equipment.

FEATURES

- Include Amplifier, Detector, Comparator, Latch, Voltage Regulator, Actuator
- Wide power supply voltage range ($V_{CC} = 2.5V \sim 10V$)
- Minimum number of external parts required.

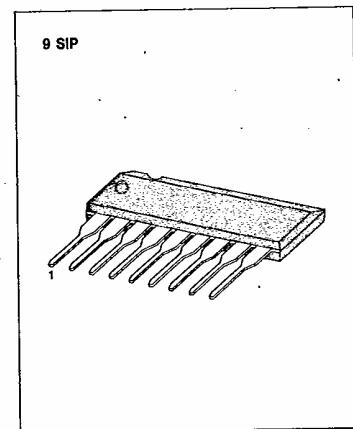
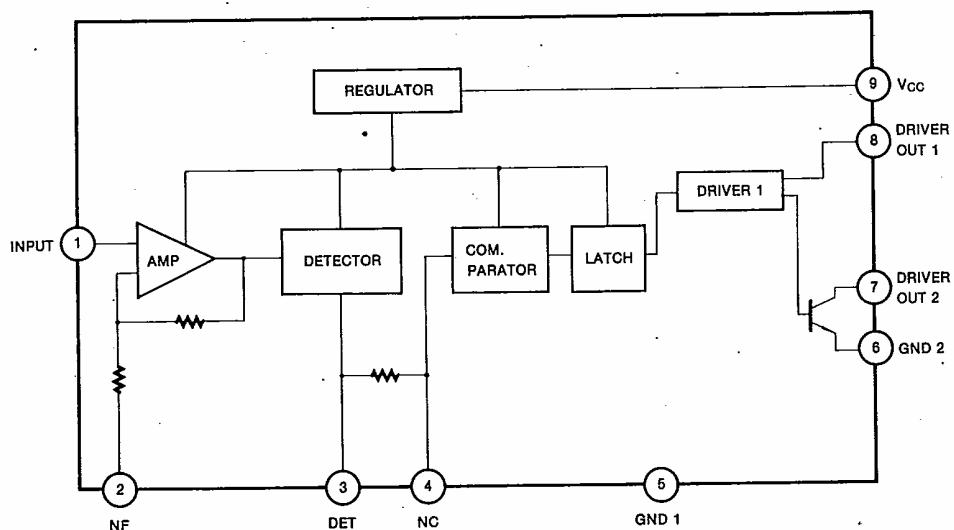
**BLOCK DIAGRAM**

Fig. 1



SAMSUNG SEMICONDUCTOR

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

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	11	V
Power Dissipation	P_d	500	mW
Operating Temperature	T_{opr}	-20 ~ +70	°C
Storage Temperature	T_{stg}	-40 ~ +150	°C

ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Operating Voltage	V_{CC}		2.5	5	10	V
Circuit Current	I_{CC}	$V_{CC} = 5\text{V}$	10	20	40	mA
Input Impedance	Z_i	$V_{CC} = 5\text{V}$		10		KΩ
Output Sink Current	I_{SINK}	Pin 8 is actuated	6	15	20	mA
Output Saturation Voltage	V_{SAT}	Pin 6 is actuated		0.25	0.45	V
Sensitivity	V_t (sen)	Output is actuated	2	4	6	mV
Comparator Hysteresis	HY		5	8	11	dB

TYPICAL APPLICATION CIRCUIT

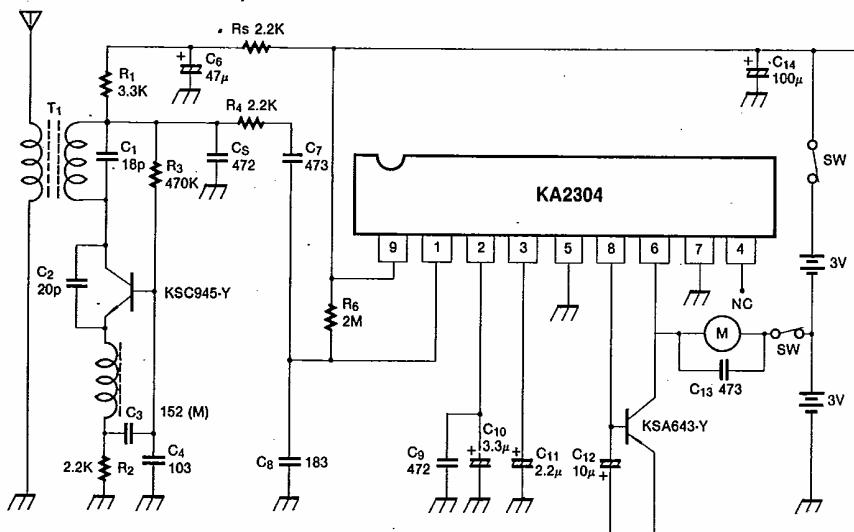


Fig. 2

