

## TA7344P

T-77-11

## PRE AMPLIFIER

The TA7344P is suit for reciver of remote control and super regeneration amplifier.

## FUNCTION

- . Regulator, Pre Amp, Peak Detector, Schmitt.
- . Regulated Voltage Output
- . Supply Voltage Range :  $V_{opr}=6\sim 12V$
- . Recommended Supply Voltage Range :  $V_{CC}=6.5\sim 10V$

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

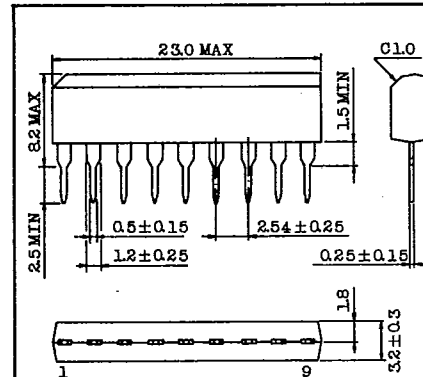
| CHARACTERISTIC           | SYMBOL    | RATING        | UNIT        |
|--------------------------|-----------|---------------|-------------|
| Supply Voltage           | $V_{CC}$  | 12            | V           |
| 1 Pin Output Current     | $I_1$     | 5             | mA          |
| Power Dissipation (Note) | $P_D$     | 400           | mW          |
| Operating Temperature    | $T_{opr}$ | $-25\sim 75$  | $^{\circ}C$ |
| Storage Temperature      | $T_{stg}$ | $-55\sim 150$ | $^{\circ}C$ |

Note : Derated above  $T_a=25^{\circ}C$  in the proportion of  $4mW/^{\circ}C$ .

ELECTRICAL CHARACTERISTICS ( $T_a=25^{\circ}C$ ,  $V_{CC}=9V$ )

| CHARACTERISTIC       | SYMBOL    | TEST CIR-CUIT | TEST CONDITION | MIN. | TYP. | MAX. | UNIT      |
|----------------------|-----------|---------------|----------------|------|------|------|-----------|
| Supply Current       | $I_{CC}$  | -             | $V_{IN}=0$     | 4.0  | 6.3  | 8.5  | mA        |
| 1 Pin Voltage        | $V_1$     | -             | $V_{IN}=0$     | 4.7  | 5.0  | 5.3  | V         |
| 6 Pin Voltage        | $V_6$     | -             | $V_{IN}=0$     | 2.0  | 2.5  | 3.0  | V         |
| Voltage Gain         | $G_v$     | -             | $f=1kHz$       | 64   | 67   | 70   | dB        |
| 6 Pin Output Voltage | $V_{OUT}$ | -             | $f=1kHz$       | 4.0  | 4.8  | -    | $V_{p-p}$ |
| Output Voltage       | "H" Level | $V_{8H}$      | $V_7=2.3V$     | 8.0  | -    | -    | V         |
|                      | "L" Level | $V_{8L}$      | $V_7=1.9V$     | -    | -    | 1.0  | V         |
| Hysteresis           | $V_H$     | -             |                | -    | 1.0  | -    | dB        |

Unit in mm



Lead pitch is 2.54 and tolerance is  $\pm 0.25$  against theoretical center of each lead that is obtained on the basis of No.1 lead.

JEDEC

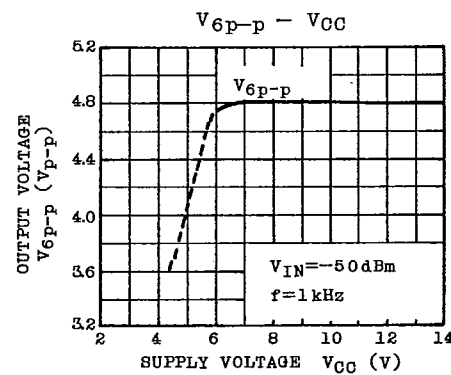
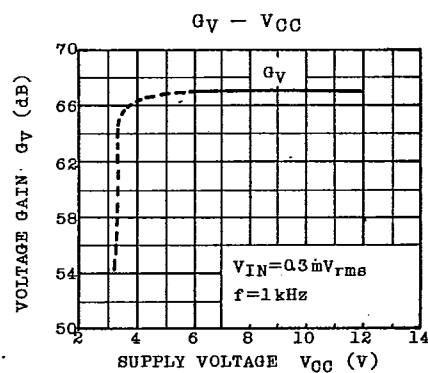
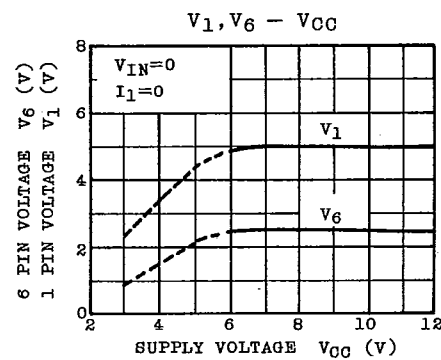
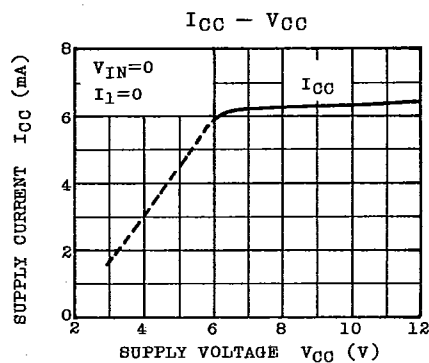
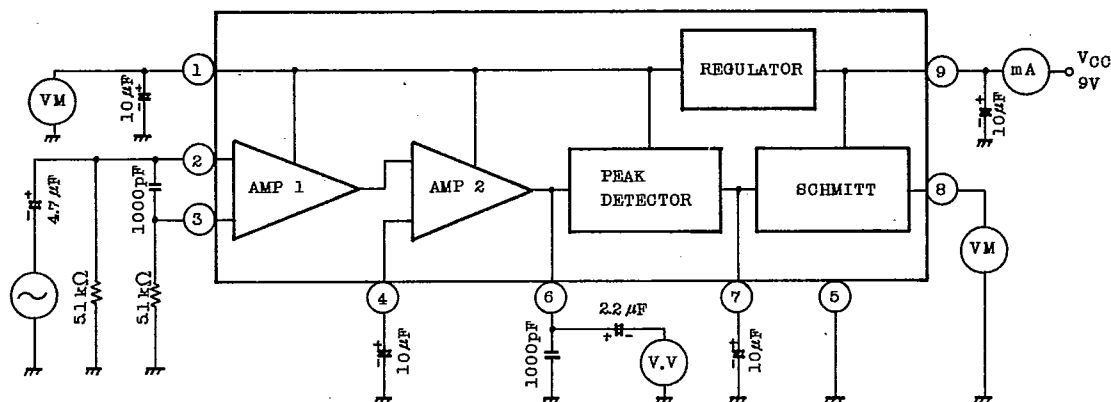
TOSHIBA

S9A-P

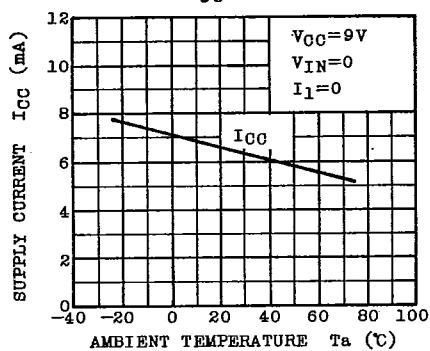
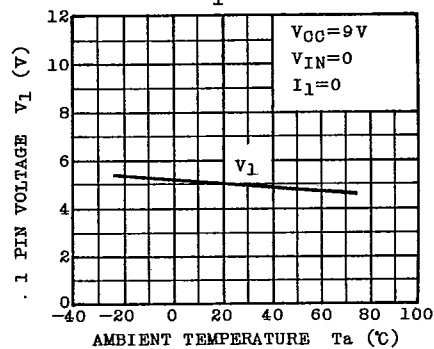
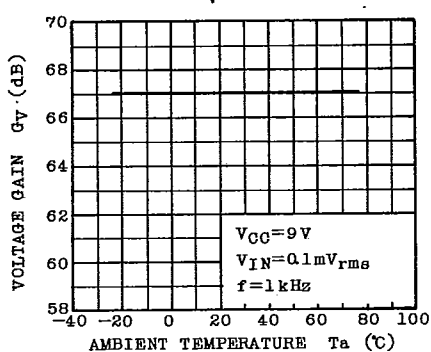
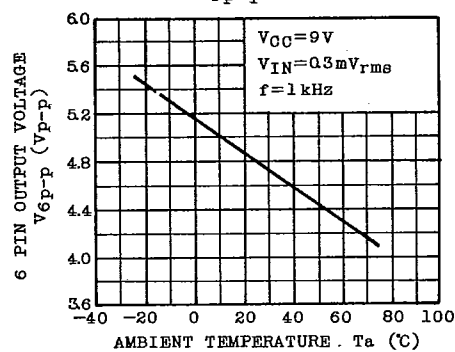
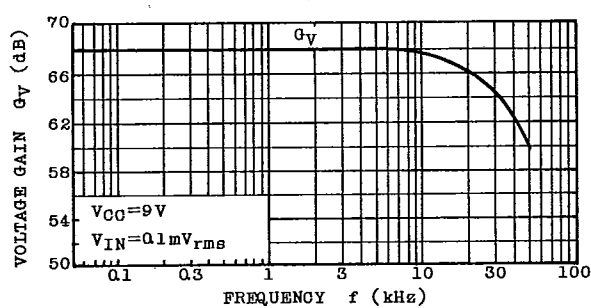
AUDIO LINEAR IC

**TA7344P**

## BLOCK DIAGRAM/TEST CIRCUIT



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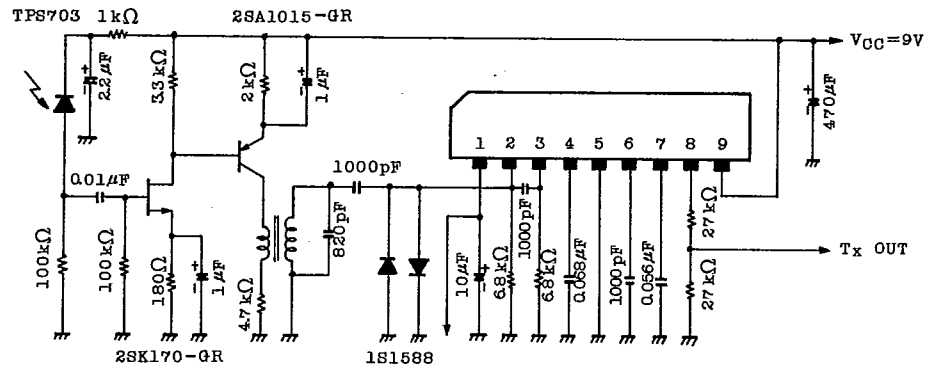
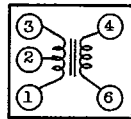
 $I_{CC} - T_a$  $V_1 - T_a$  $G_v - T_a$  $V_{6p-p} - T_a$  $G_v - f$ 

AUDIO LINEAR IC

**TA7344P**

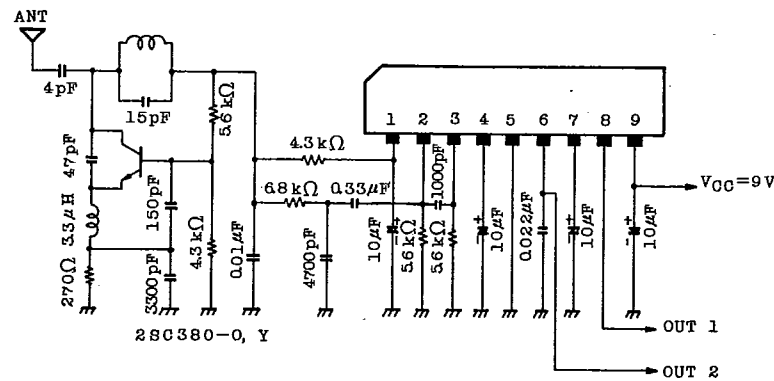
## APPLICATION

## 1. RECEIVER OF REMOTE CONTROL

 $V_{stb}$  5V (Typ.)

|       | URNS            | INDUCTANCE |
|-------|-----------------|------------|
| ① - ③ | 600T 2UEW-0.08φ | 17.5mH     |
| ① - ② | 103T 2UEW-0.08φ | 16.6mH     |
| ④ - ⑥ | 43T 2UEW-0.08φ  | 134μH      |

## 2. SUPER REGENERATION AMPLIFIER



OUT 1 : Incase of be modulation frequency is "H" level, and no modulation frequency is "L" level.

OUT 2 : Amplifier output.

**TOSHIBA**