

AN3383K

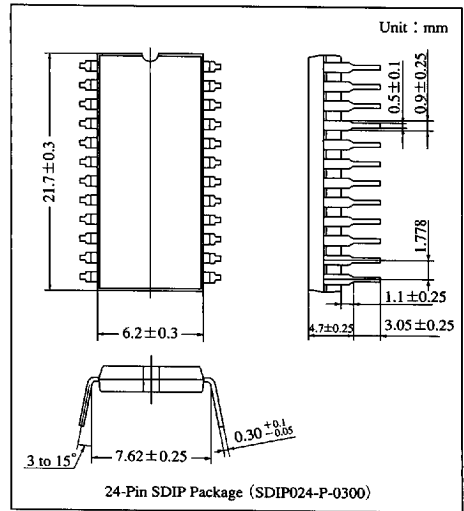
4-Head VCR Recording/Playback Amplifier IC

Overview

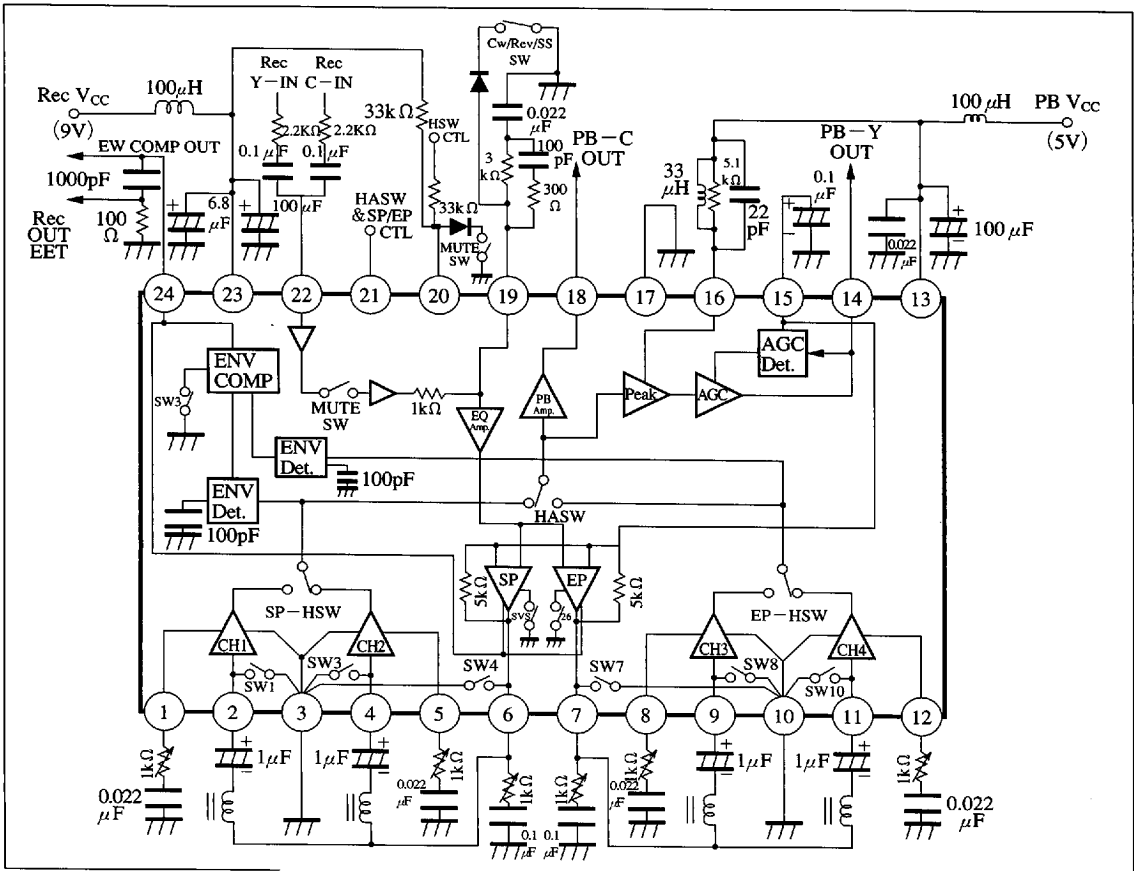
The AN3383K is a recording and playback amplifier IC for 4-head VCR. It is 24-pin SDIP-package IC and incorporates all recording and playback functions. Some required external components are commonly used for both recording and playback, resulting in fewer external components, lower cost, and smaller VCR.

Features

- Operating supply voltages : 9V typ. for recording, and 5V typ. for playing
- Low playback noise : 1 μ V r.m.s. max. equivalent input noise voltage
- Constant-current output recording amplifier
- Recording output monitor pins for easier recording level adjustment



Block Diagram



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ICs for VCR

■ Pin Descriptions

| Pin No. | Pin name | Pin No. | Pin name |
|---------|---|---------|--|
| 1 | Ch1 damping adjustment | 13 | Playback V _{CC} |
| 2 | Ch1 input for playback, and grounded for recording | 14 | AGC output |
| 3 | SP ground | 15 | AGC detection and Rec. feedback |
| 4 | Ch2 input for playback, and grounded for recording | 16 | Peaking |
| 5 | Ch2 damping adjustment | 17 | GND |
| 6 | SP rec. output for recording, and grounded for playback | 18 | Playback amp. output |
| 7 | EP rec. output for recording, and grounded for playback | 19 | Rec. equalization and play mode setting |
| 8 | Ch3 damping adjustment | 20 | Head switch control and rec. muting |
| 9 | Ch3 input for playback, and grounded for recording | 21 | HASW control and Rec. SP/EP switching |
| 10 | EP ground | 22 | Rec. signal input |
| 11 | Ch4 input for playback, and grounded for recording | 23 | Rec. V _{CC} |
| 12 | Ch4 damping adjustment | 24 | Envelope comparator output and rec. output level detection |

■ Absolute Maximum Ratings (Ta = 25 °C)

| Parameter | Symbol | Rating | Unit |
|--|---------------------|-------------|------|
| Supply voltage (1) | Rec V _{CC} | 10 | V |
| Supply voltage (2) | PB V _{CC} | 6.0 | V |
| Power dissipation ^{Note 2)} | P _D | 784 | mW |
| Operating ambient temperature ^{Note 1)} | T _{opr} | -20 to +70 | °C |
| Storage temperature ^{Note 1)} | T _{stg} | -55 to +150 | °C |

Note 1) Ta = 25°C except operating ambient temperature and storage temperature.

Note 2) Allowable power dissipation of the package at Ta = 70°C.

■ Recommended Operating Range (Ta = 25 °C)

| Parameter | Symbol | Range |
|------------------------------------|---------------------|--------------|
| Operating supply voltage range (1) | PB V _{CC} | 4.5V to 5.5V |
| Operating supply current range (2) | Rec V _{CC} | 8.0V to 9.5V |

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