AN3313, AN3313S

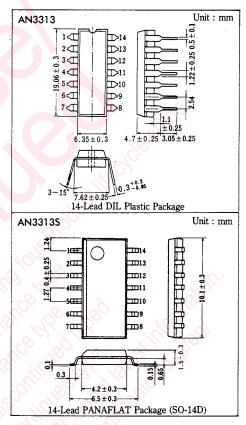
Head Amplifier Circuits for VTR (2-Head Type)

Outline

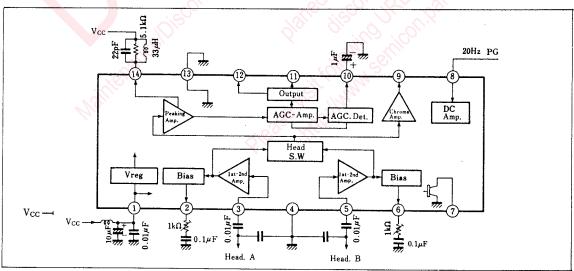
The AN3313 and the AN3313S are integrated circuits designed for head amplifier circuits for VTR (2-head type).

Features

- Supply voltage : $V_{cc}=5V$
- Built-in peaking amplifier circuit
- Less noise voltage to input (1 μ Vrms)



Block Diagram



Pin

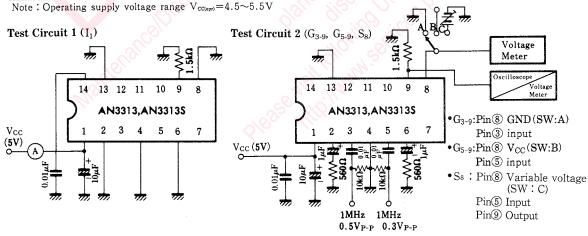
| Pin No. | Pin Name | Pin No. | Pin Name | | | |
|---------|------------------------|---------|----------------------|--|--|--|
| 1 . | V _{cc} | 8 | PG Pulse Input | | | |
| 2 | CH1 Damping Adjustment | 9 | Chroma Signal Output | | | |
| 3 | CH1 Input | 10 | AGC Level Detection | | | |
| 4 | GND | 11 | AGC Output B | | | |
| 5 | CH2 Input | 12 | AGC Output A | | | |
| 6 | CH2 Damping Adjustment | 13 | GND | | | |
| 7 | ON Switch at PB | 14 | Peaking | | | |

Absolute Maximum Ratings $(Ta=25^{\circ})$

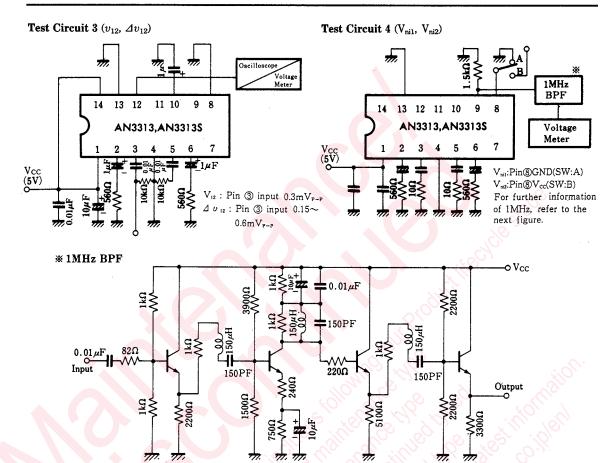
| Item | Symbol | Rating | Unit | |
|-------------------------------|--------------------|----------|------|--|
| Supply Voltage | V _{CC} | 6.0 | V | |
| Power Dissipation(Ta=70°C) | P_{D} | 130 | mW | |
| Operating Ambient Temperature | T_{opr} | -20~+70 | °C | |
| Storage Temperature | $T_{ m stg}$ | -55~+150 | °C | |

■ Electrical Characteristics (V_{cc}=5V, Ta=25°C)

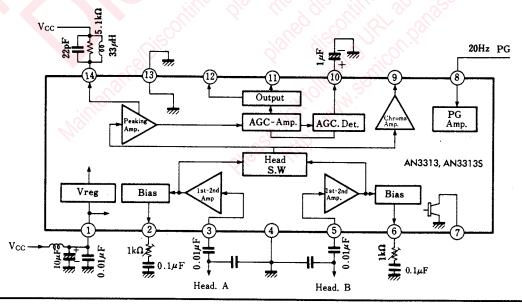
| Item | Symbol | Test Circuit | Condition | min. | typ. | max. | Unit |
|------------------------------------|------------------|-----------------|---|------|------|------|------------------|
| Circuit Current | I ₁ | 1 | ②, ⑥, ⑧ GND. ⑨ 1.5×Ω GND. ⑭ V _{CC} | 10 | | 24 | mA |
| Ch1 Gain | G ₃₋₉ | 2 | ③ 1MHz, 0.5mV _{P−P} . ⑨ Out | 52.5 | | 62.5 | dB |
| Ch2 Gain | G ₅₋₉ | 2 | ⑤ 1MHz, 0.5mV _{P−P} . ⑨ Out | 52.5 | | 62.5 | dB |
| AGC Output Amplitude | v_{12} | 3 | ③ 4MHz, 0.3mV _{P-P} . ② Out | 154 | 10. | 286 | mV_{P-P} |
| AGC Control Sensitivity | Δv_{12} | 3 | ③ 4MHz, 0.3mV _{P-P} . ② Out | D. | C/ | 3 | dB |
| PG Switch Changeover Sensitivity | S ₈ | 2 | ③ 1MHz, 0.5mV _{P-P} . ⑥ GND ⑧ Varible voltage⑨out | | | 3.5 | v |
| Noise Voltage Referred to Input(1) | V _{ni1} | 4 | ® GND® Out 1MHz BPF added | | | 1 | μV_{rms} |
| Noise Voltage Referred to Input(2) | V _{ni2} | 4 | 8 V_{CC}9 Out 1MHz BPF added | | | 1 | $\mu V_{ m rms}$ |



Increasing the electric potential of Pin ® from 0V, measure the electric potential of Pin ® when Pin ⑨ output appears.



Application Circuit



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