

AN5521

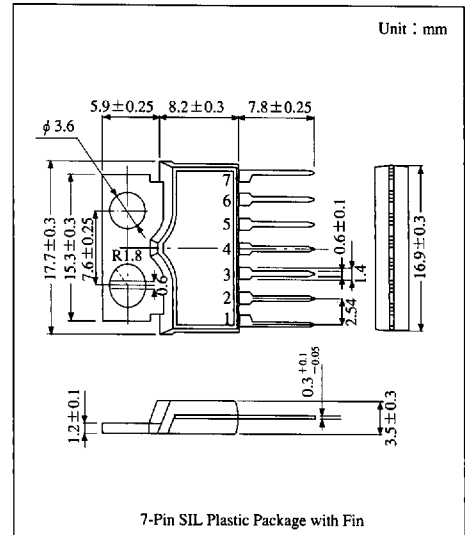
TV Vertical Deflection Output IC

Overview

The AN5521 is an integrated circuit designed for TV vertical deflection output circuit. Combining with the deflection-signal processing IC, the vertical output circuit design becomes easy.

Features

- Low power consumption, direct deflection coil driving capability (Flyback voltage of two times as high as supply voltage is applied during only flyback period)
- High breakdown voltage : 60V

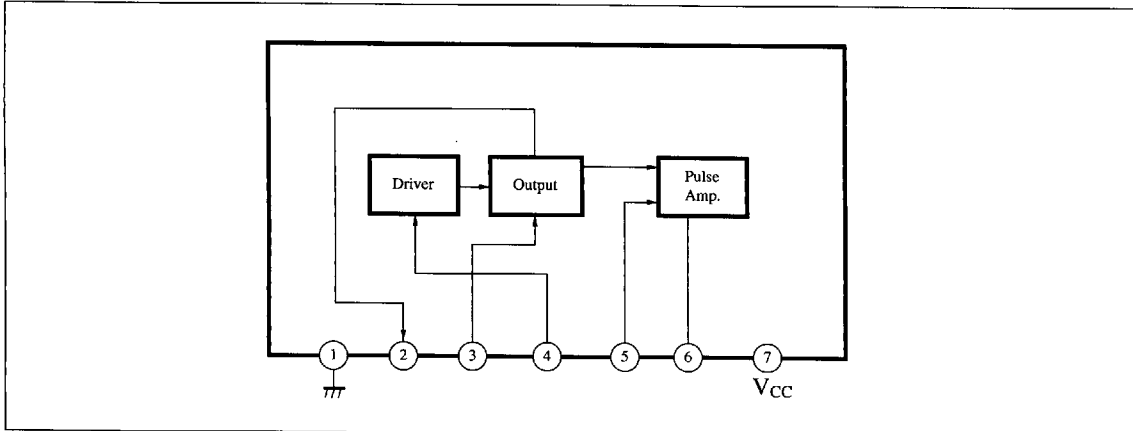


ICs for
TV

Pin Descriptions

| Pin No. | Pin name |
|---------|---------------------------|
| 1 | GND |
| 2 | Output |
| 3 | Supply voltage for output |
| 4 | Input |
| 5 | Trigger pulse input |
| 6 | Pulse amp. output |
| 7 | V _{CC} |

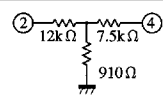
Block Diagram



■ Absolute Maximum Ratings (Ta=25°C)

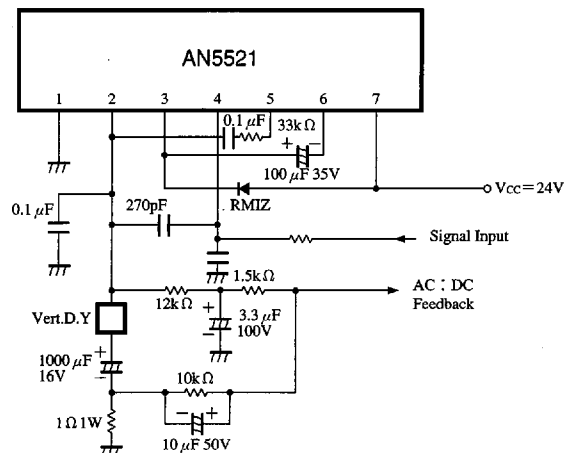
| Parameter | | Symbol | Rating | | Unit |
|-------------------|-------------------------------|------------------|-------------|------|-------------------|
| Voltage | Supply voltage | V _{CC} | 30 | | V |
| | Circuit voltage | V ₃₋₁ | 0 | 60 | V |
| | | V ₄₋₁ | -1 | 6 | V |
| | | V ₅₋₁ | -1 | 3 | V |
| Current | Supply current | I _{CC} | 360 | | mA |
| | Circuit current | I ₂ | -1800 | 1800 | mA _{O.P} |
| | | I ₆ | -1800 | 1800 | mA _{O.P} |
| Power dissipation | | P _D | 8 | | W |
| Temperature | Operating ambient temperature | T _{opr} | -20 to +70 | | °C |
| | Storage temperature | T _{stg} | -55 to +150 | | °C |

■ Electrical Characteristics (Ta=25°C)

| Parameter | Symbol | Condition | min | typ | max | Unit |
|---|-------------------------------|---|------|------|------|-------------------|
| Deflection current | I _{y(P-P)} | | 1700 | 1800 | 1900 | mA _{P-P} |
| Deflection current linearity | ΔI _{y(+)} | | 59 | — | 175 | mA _{P-P} |
| Deflection current linearity | ΔI _{y(-)} | | 54 | — | 162 | mA _{P-P} |
| Deflection current change with ambient temperature* | ΔI _{y/T_a} | T _a = -20 to +70°C | -1.5 | — | 1.5 | % |
| Center voltage | V _{MID} | | 13.2 | 13.8 | 14.4 | V |
| Flyback pulse amplitude | V _(FBP) | | 47 | — | — | V |
| Static circuit current | I _{CQ} | V ₃₋₁ = 24V V ₇₋₁ = 24V V ₅₋₁ = 0  | 7 | 15 | 30 | mA |
| Output Tr saturation voltage | V ₃₋₂ | V ₃₋₁ = V ₇₋₁ = 24V, Pin②-① = 33Ω V ₄₋₁ = 0.3V, V ₅₋₁ = 0 | — | 3.0 | 4.0 | V |
| Output Tr Saturation voltage | V ₂₋₁ | V ₃₋₁ = V ₇₋₁ = 24V, Pin②-③ = 33Ω V ₄₋₁ = 1.3V, V ₅₋₁ = 0 | — | 1.3 | 2.0 | V |
| Q ₂₁ saturation voltage | V ₆₋₁ | V ₇₋₁ = 24V, Pin⑦-⑥ = 1.2kΩ V ₅₋₁ = 0 | — | — | 0.5 | V |
| Thermal resistance | R _{th(j-c)} | | — | — | 4 | °C/W |

* Reference value for design

■ Application Circuit



■ 6932852 0014339 0T0 ■

Panasonic