

# UTC PC1031 LINEAR INTEGRATED CIRCUIT

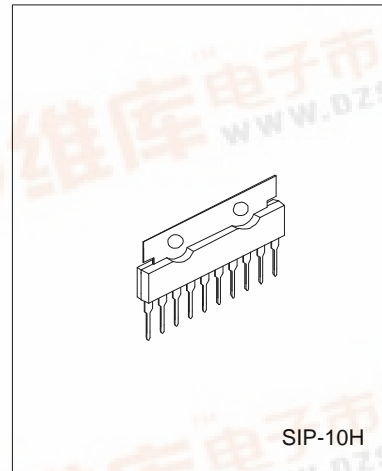
## TV HORIZONTAL DEFLECTION CIRCUIT

### DESCRIPTION

UTC PC1031 is designed for B/W TV and small screen color TV. It generates deflection signal and drives deflection coil.

### FEATURES

- \*Low external components required
- \*Wide operating supply voltage(9V-18V)
- \*Adjustable synchronous input range
- \*Adjustable blanking voltage
- \*Large output current(2AP-P)
- \*Built in adjustable fly-back time



SIP-10H

### APPLICATION CIRCUIT

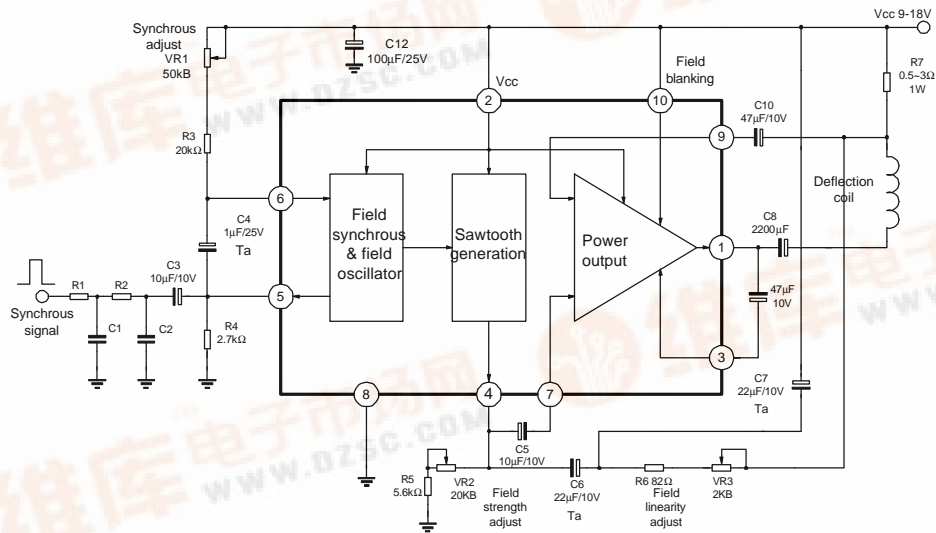


Fig 1



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## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| PARAMETER             | SYMBOL | VALUE   | UNIT |
|-----------------------|--------|---|------|
| Supply Voltage        | VCC    | 20  | V    |
| Output Current        | IP-P   | 2   | AP-P |
| Power Dissipation     | PD1    | 1.5(Ta=+75°C)   | W    |
| Power dissipation     | PD2    | 2.15(Ta=+75°C)<br>With heat sink<br>(31.6 x 31.6 x 1mm <sup>3</sup> ) | W    |
| Operating temperature | TOPR   | -20 ~ +75   | °C   |
| Storage Temp.         | TSTG   | -40 ~ +150  | °C   |

## ELECTRICAL CHARACTERISTICS(Vcc=12V,Ta=25°C)

| PARAMETER   | SYMBOL          | TEST CONDITIONS   | MIN            | TYP            | MAX            | UNIT | FIG |
|---|-----------------|---|----------------|----------------|----------------|------|-----|
| Supply Current                                      | ICC             | No signal input and load                                | 15             | 30             | 46             | mA   | 2   |
| Output Voltage                                      | VN              | No signal input and load                                | 5.6            | 6.0            | 6.4            | V    | 2   |
| Field osc Frequency                                 | fV              | Synchronization voltage on Pin 5 is 1.3VP-P             | i <sup>a</sup> | 50/60          | i <sup>a</sup> | HZ   | 2   |
| Free osc Frequency                                  | fVO             | Cosc=1μF Ta,<br>Rosc=38.1KΩ                             | 53             | 60             | 67             | HZ   | 2   |
| Synchronization Input Range                         | Δf(PULL)        | Synchronization voltage on Pin 5 is 1.3VP-P             | -10            | -12            | i <sup>a</sup> | HZ   | 2   |
| Free osc Frequency Change with Supply Voltage       | ΔfVO            | fVO=60HZ,VCC=12V<br>fVO deviation for +2V change of Vcc | i <sup>a</sup> | i <sup>a</sup> | +1.0           | HZ   | 2   |
| Synchronization Range deviation with Supply Voltage | Δf(PULL)<br>VCC | VCC is +2V deviated from 12V                            | i <sup>a</sup> | i <sup>a</sup> | +3.0           | HZ   | 2   |
| Output Saturation Voltage                           | VSAT            | I <sub>o</sub> =0.7A                                    | i <sup>a</sup> | 1.3            | 1.6            | V    | 2   |
| Pin 4 Output Pulse Width                            | tO              | Cosc=1μ F Ta,<br>Rosc=38.1KΩ                            | 300            | 420            | 600            | μsec | 2   |

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## TEST CIRCUIT

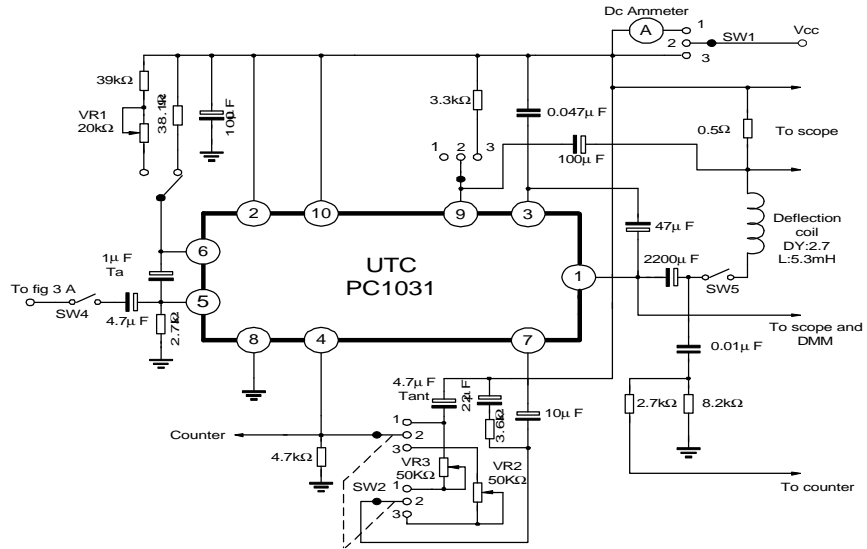


FIG2

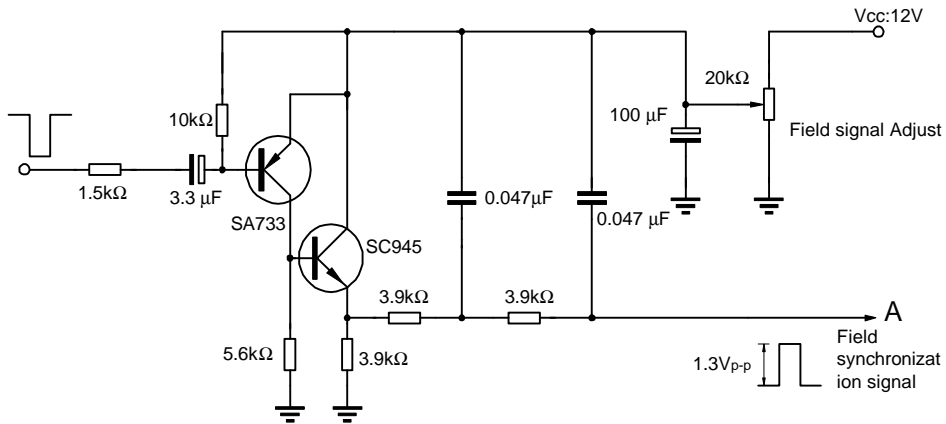


FIG3