

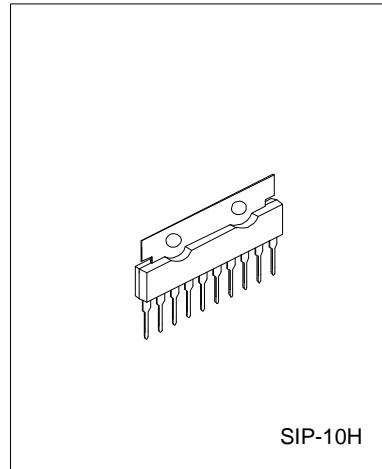
## TV HORIZONTAL DEFLECTION CIRCUIT

## 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



## APPLICATION CIRCUIT

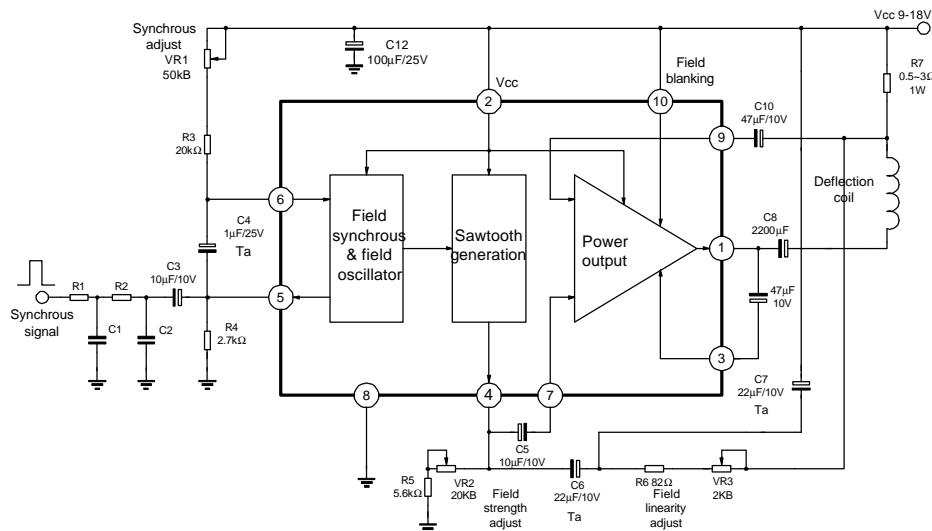


Fig 1

# UTC PC1031 LINEAR INTEGRATED CIRCUIT

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

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	VCC	20	V
Output Current	I <sub>P-P</sub>	2	A <sub>P-P</sub>
Power Dissipation	PD1	1.5( $T_a=+75^\circ\text{C}$ )	W
Power dissipation	PD2	2.15( $T_a=+75^\circ\text{C}$ ) With heat sink ( $31.6 \times 31.6 \times 1\text{mm}^3$ )	W
Operating temperature	TOPR	-20 ~ +75	°C
Storage Temp.	TSTG	-40 ~ +150	°C

## ELECTRICAL CHARACTERISTICS( $V_{CC}=12\text{V}, T_a=25^\circ\text{C}$ )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT	FIG
Supply Current	I <sub>CC</sub>	No signal input and load	15	30	46	mA	2
Output Voltage	V <sub>N</sub>	No signal input and load	5.6	6.0	6.4	V	2
Field osc Frequency	f <sub>V</sub>	Synchronization voltage on Pin 5 is 1.3VP-P	i <sup>a</sup>	50/60	i <sup>a</sup>	Hz	2
Free osc Frequency	f <sub>VO</sub>	C <sub>osc</sub> =1μF Ta, R <sub>osc</sub> =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	Δf <sub>VO</sub>	f <sub>VO</sub> =60Hz,V <sub>CC</sub> =12V f <sub>VO</sub> deviation for +-2V change of V <sub>CC</sub>	i <sup>a</sup>	i <sup>a</sup>	+/-1.0	Hz	2
Synchronization Range deviation with Supply Voltage	Δf(PULL) V <sub>CC</sub>	V <sub>CC</sub> is +2V deviated from 12V	i <sup>a</sup>	i <sup>a</sup>	+/-3.0	Hz	2
Output Saturation Voltage	V <sub>SAT</sub>	I <sub>O</sub> =0.7A	i <sup>a</sup>	1.3	1.6	V	2
Pin 4 Output Pulse Width	t <sub>O</sub>	C <sub>osc</sub> =1μF Ta, R <sub>osc</sub> =38.1KΩ	300	420	600	μsec	2

TEST CIRCUIT

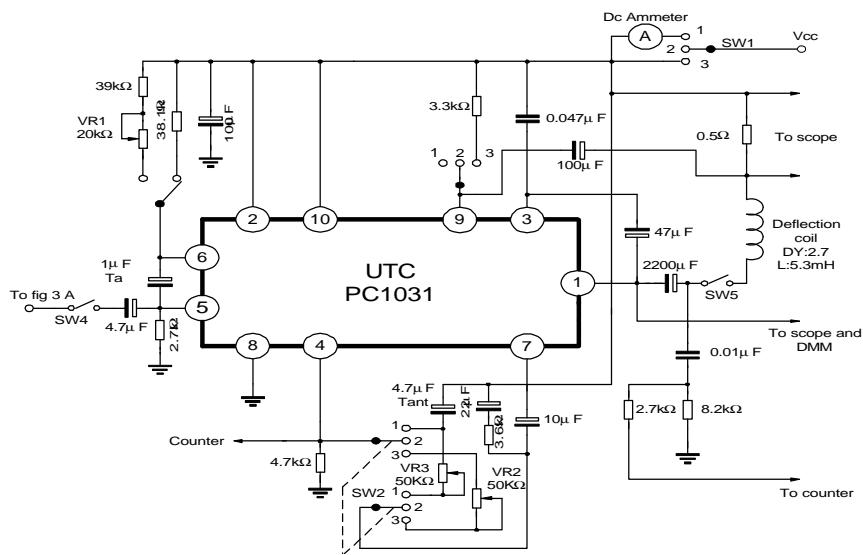


FIG2

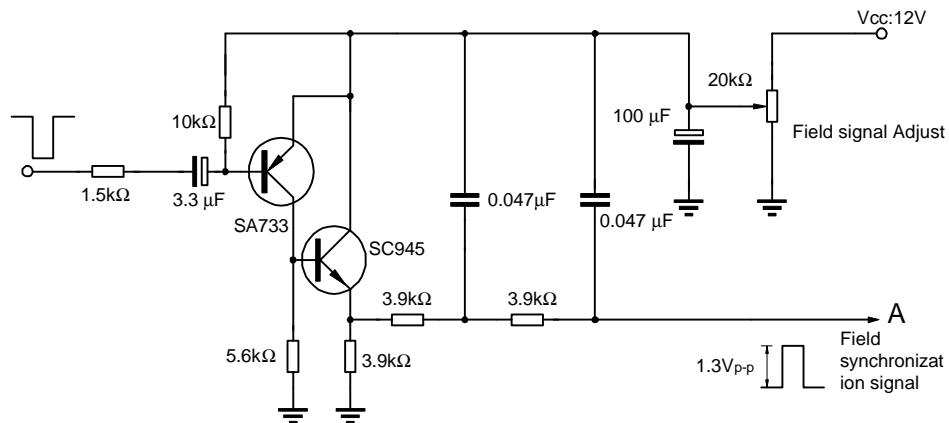


FIG3