

UTC PC1031 LINEAR INTEGRATED CIRCUIT

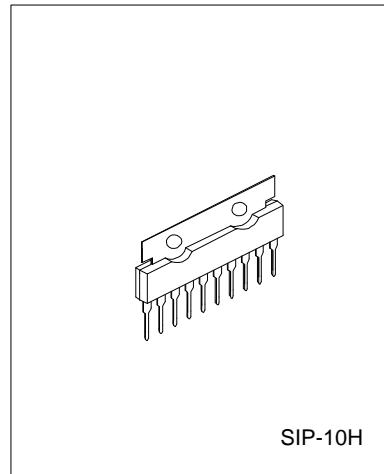
TV HORIZONTAL DEFLECTION CIRCUIT

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



APPLICATION CIRCUIT

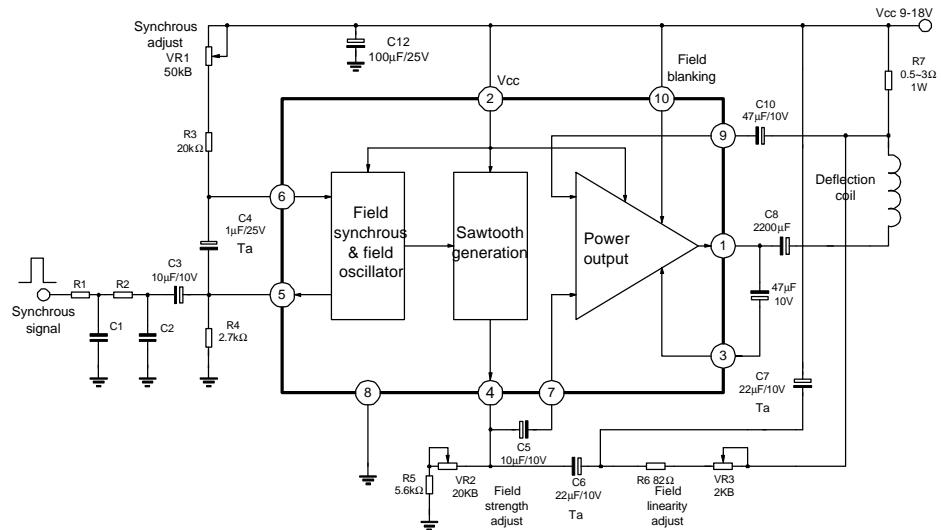


Fig 1

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

PARAMETER	SYMBOL	VALUE	UNIT
Supply Voltage	VCC	20	V
Output Current	IP-P	2	AP-P
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	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 ^a	50/60	i ^a	Hz	2
Free osc Frequency	fVO	Cosc=1μF Ta, 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 ^a	Hz	2
Free osc Frequency Change with Supply Voltage	ΔfVO	fVO=60Hz,VCC=12V fVO deviation for +/-2V change of Vcc	i ^a	i ^a	+/-1.0	Hz	2
Synchronization Range deviation with Supply Voltage	Δf(PULL) VCC	VCC is +/-2V deviated from 12V	i ^a	i ^a	+/-3.0	Hz	2
Output Saturation Voltage	VSAT	Io=0.7A	i ^a	1.3	1.6	V	2
Pin 4 Output Pulse Width	tO	Cosc=1μF Ta, Rosc=38.1KΩ	300	420	600	μsec	2

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TEST CIRCUIT

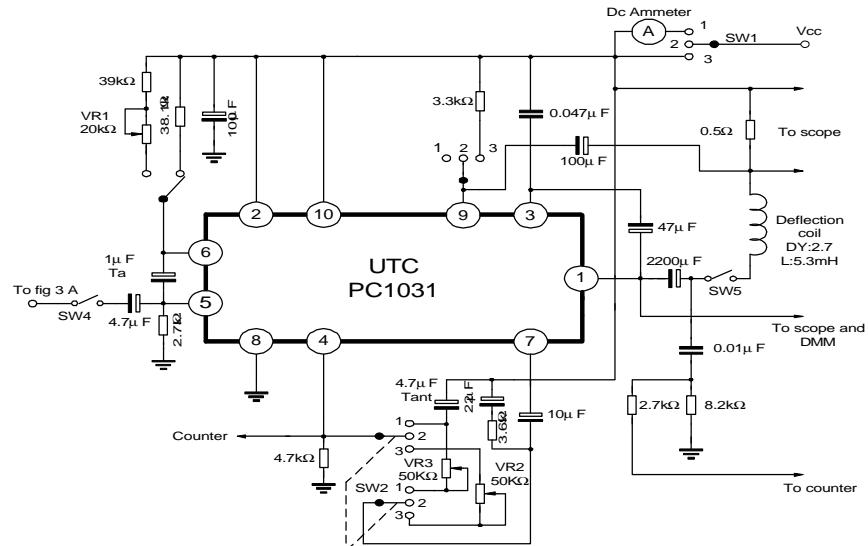


FIG2

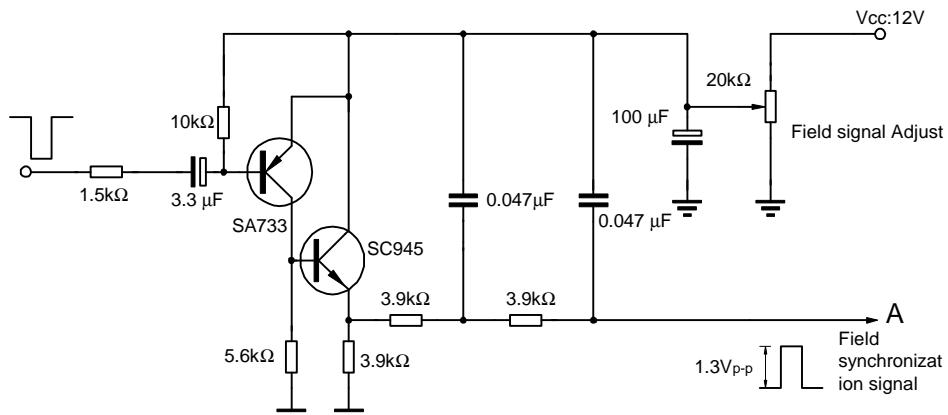


FIG3