

# UTC PC1031 LINEAR INTEGRATED CIRCUIT

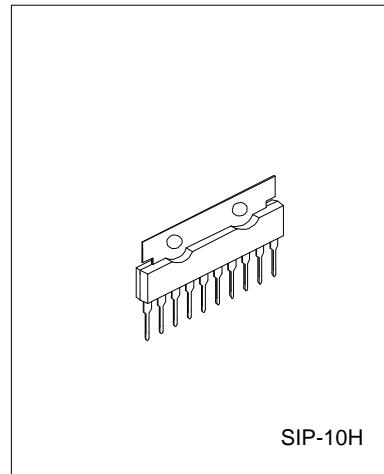
## TV HORIZONTAL DEFLECTION CIRCUIT

### 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

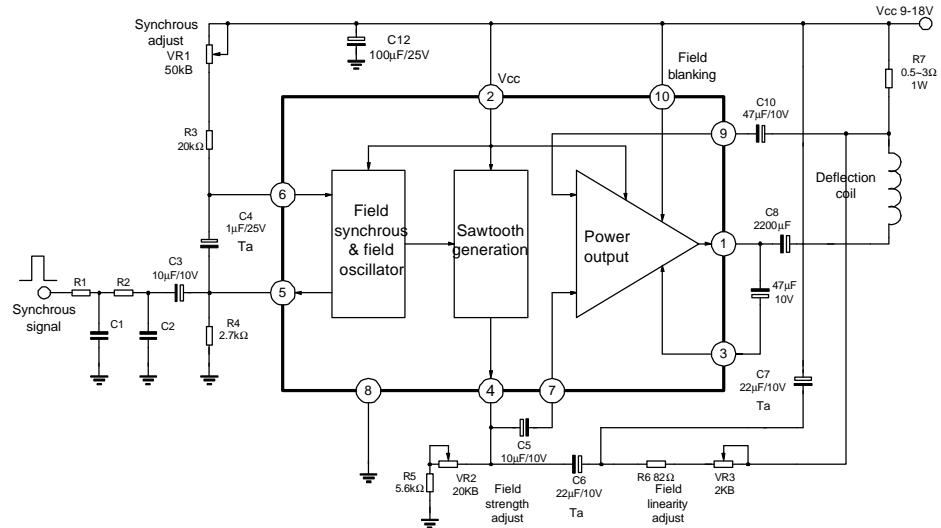


Fig 1

# 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	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 <sup>a</sup>	50/60	i <sup>a</sup>	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 <sup>a</sup>	Hz	2
Free osc Frequency Change with Supply Voltage	ΔfVO	fVO=60Hz,VCC=12V 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) VCC	VCC is +/-2V deviated from 12V	i <sup>a</sup>	i <sup>a</sup>	+/-3.0	Hz	2
Output Saturation Voltage	VSAT	Io=0.7A	i <sup>a</sup>	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

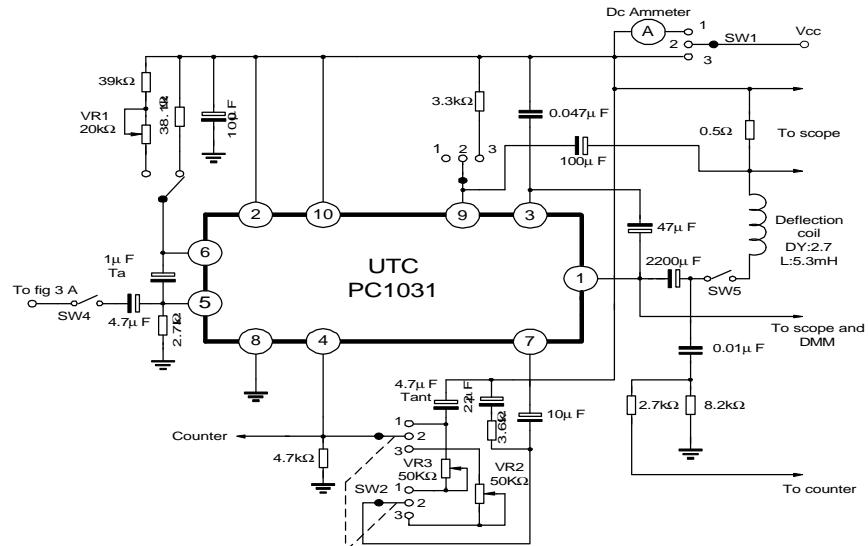


FIG2

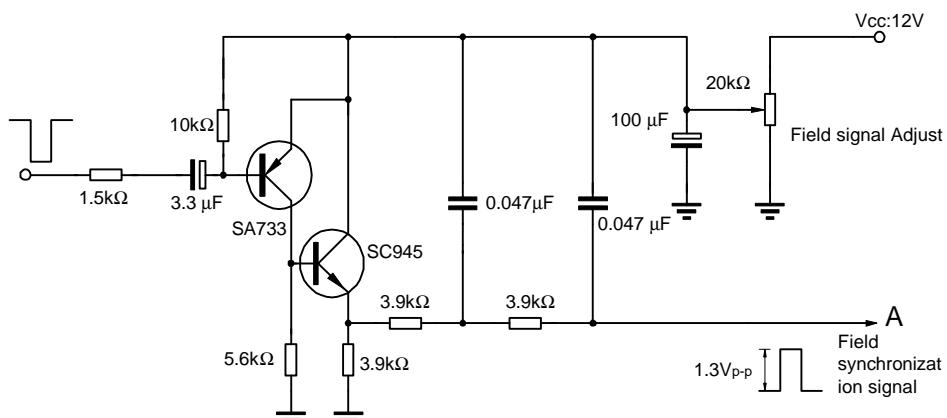


FIG3