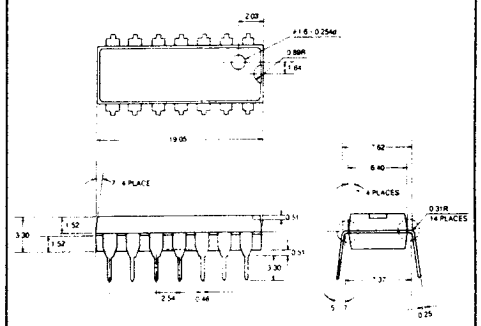
DBL 2071

HORIZONTAL PROCESSOR FOR MONITOR SET

14DIP Unit : mm



The DBL2071, is a monolithic integrated circuit encapsuled in a 14 dual-in-line package designed for horizontal deflection signal processor for a CRT display.

This IC can use with the DBL2054D(Vertical deflection IC).

☐ FUNCTIONS

- ○ Horizontal oscillator & AFC
- ○ X-Ray protector
- ○ AFC sawtooth wave generator
- ○ Horizontal pulse duty setting
- ○ Horizontal phase shifter

☐ FEATURES

- ○ The horizontal oscillation frequency is stable from 15KHz to 100KHz.
- ○ The horizontal display can be shifted right or left.
- ○ The horizontal synchronizing pulse input can be used intact regardless of the difference in pulse polarity and pulse width.
- ○ The AFC feedback sawtooth wave can be obtained by simply applying a flyback pulse to the IC as a trigger pulse.
- ○ Any duty of horizontal pulse can be set.

☐ MAXIMUM RATINGS(T_a=25℃)

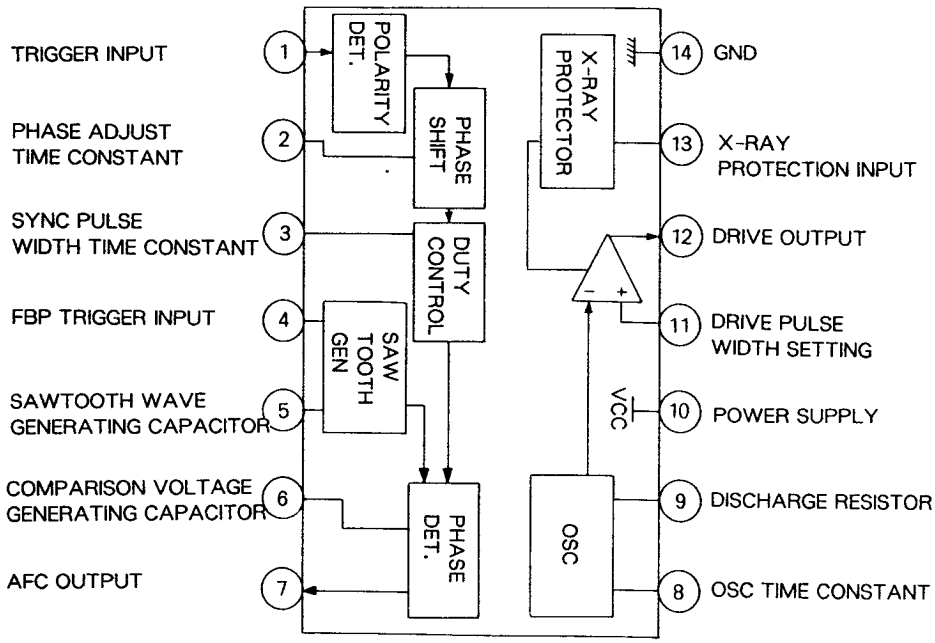
CHARACTERISTICS	SYMBOL	VALUE	UNIT
Supply Voltage	V_{cc}(max)	14	V
Power Dissipation	Pd	520	mW
Operating Temperature	Topr	−20~+70	℃
Storage Temperature	Tstg	−55~+150	℃

☐ OPERATING CONDITION

(T_a=25℃)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT
Supply Voltgae	V_{cc}	9.0	12.0	13.5	V
Hor. Pulse Voltage	P_v	2.0	5.0	6.0	$V_{p\ p}$

☐ BLOCK DIAGRAM

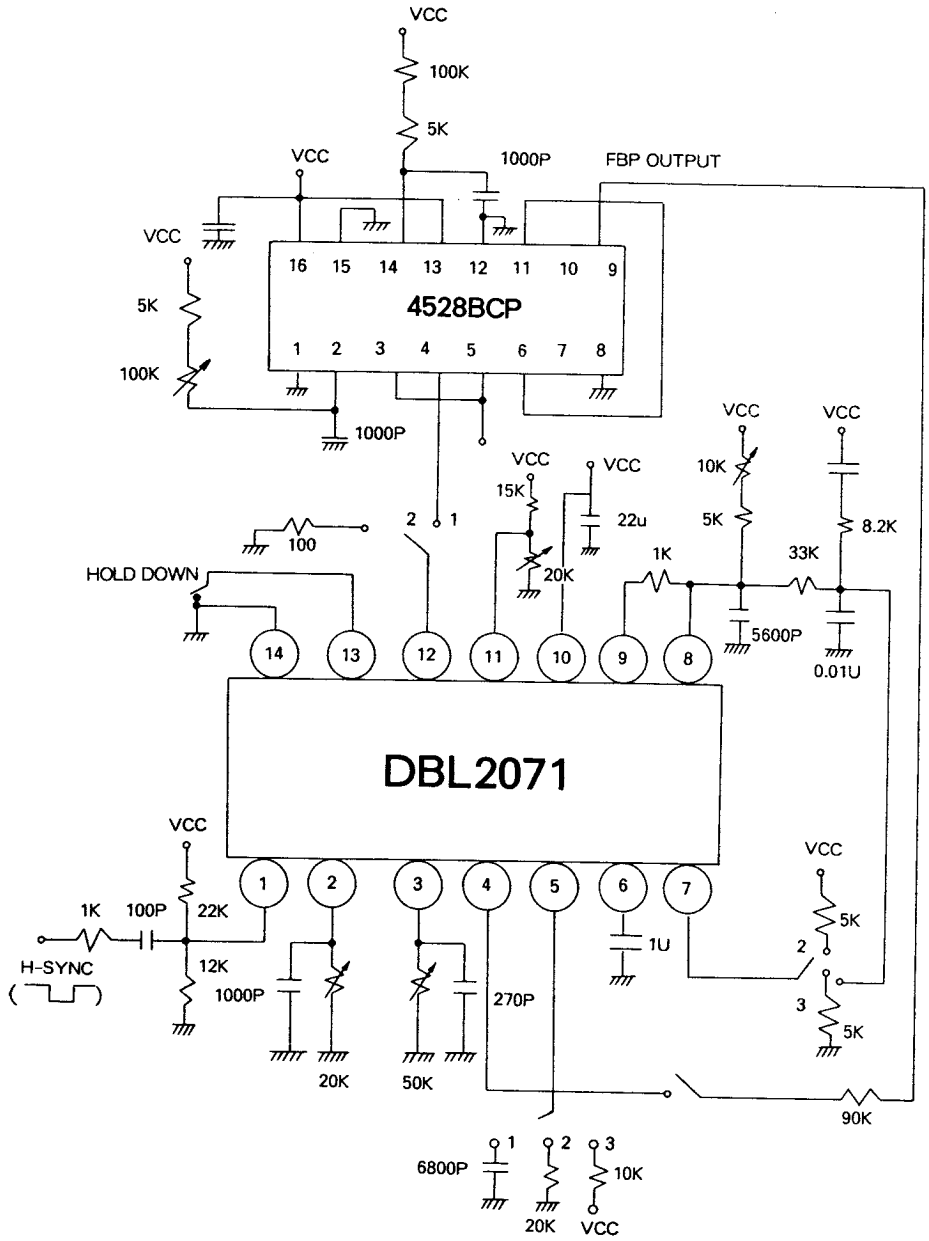


☐ ELECTRICAL CHARACTERISTICS

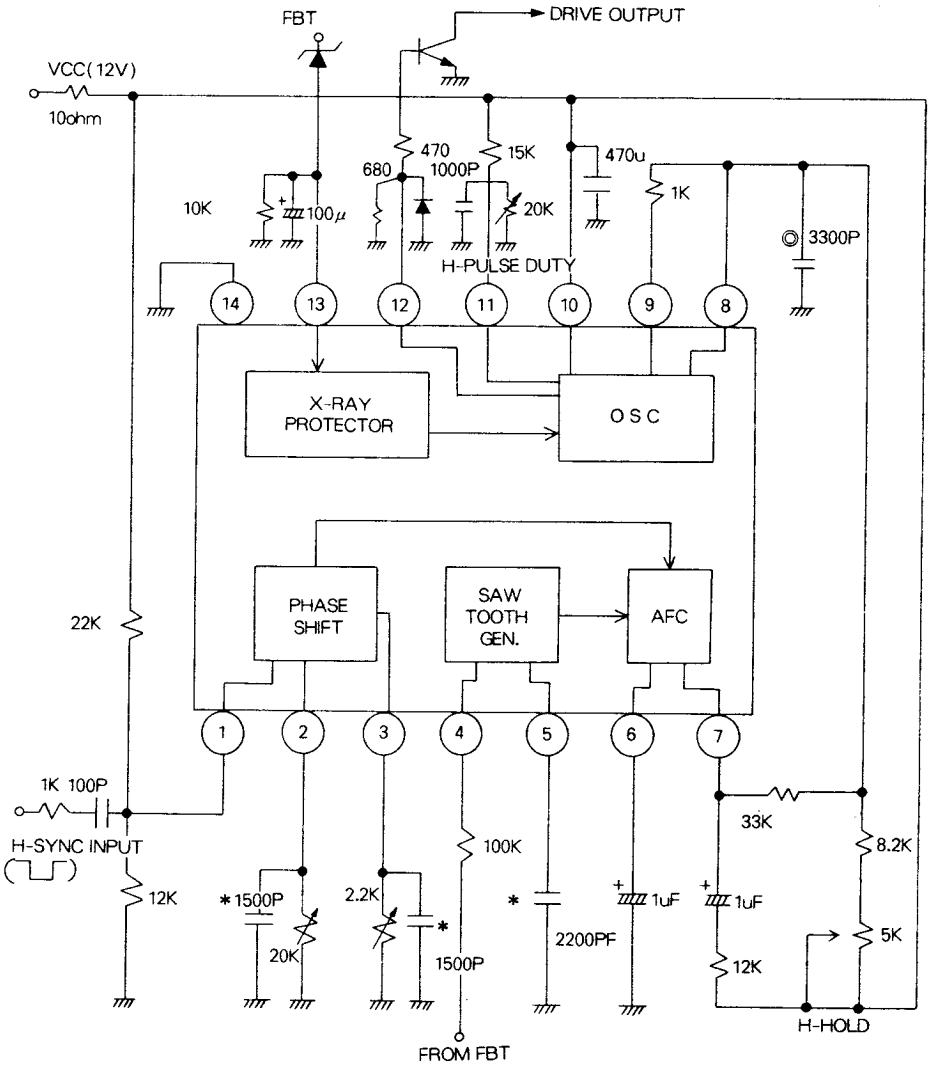
(Vpin10 = 12V, P_d = 25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Current	I_{cc}	V_{cc} = 12V	12	21	30	mA
Oscillation Start Voltage	V_{osc}(H)		–	–	4.0	V
Free-Running Frequency	F_{ho}	Fh = 15.734KHz	−750	–	750	Hz
AFC DC Loop Current	I_{afc}	Pin2 : GND Pin3 : 5.0V, Pin : 4.0V Pin5 : 4.0V(+), 6.0V(−) Load : 5Kohm	±0.85	–	±1.6	mA
Frequency Drift with supply Voltage	F_v(H)	V10 = 12 + 1V 15.734KHz at 12V	−50	–	50	Hz
Frequency Drift with Amboent Temperature	F_t(H)	Ta = − 10 to +60℃	−2.9	–	2.9	Hz/℃
Comparision Wave Shaping Input Voltage	V4		0.6	0.65	0.8	V
X-Ray Protector Starting Voltage	V13		0.5	0.75	0.9	V
Horizontal Drive Current	I12	Pin8 : 3.0V Pin11 : 6.0V Load : 100ohm	6.0	9.0	12.0	mA
Sawtooth Gen. Current Source	I_{src5}	Pin4 : GND Load : 20Kohm	220	260	320	μA
Sawtooth Gen. Current Sink	I_{sik5}	Pin4 : 1.0V Load : 10Kohm	400	500	600	μA
Pulse Width	T_{pw}	Pin11 : 6.0V	37	40	47	%
Pull-in Range	F_{pull}		±400		–	Hz

☐ TEST CIRCUIT



☐ APPLICATION CIRCUIT



POLYESTER FILM CAPACITOR

- Temperature Range : −40℃ ~ +85℃
- Rated Voltage : $100V_{DC}$
- Tolerance : ±5%

◎ POLYPROPYLENE FILM CAPACTIOR

- Temperature Range : −40℃ ~ +85℃
- Rated Voltage : $100V_{DC}$
- Tolerance : ±5%