

# NF3004-VC20A

## ●Applications

“Print club” (color photo printer) terminals

3) Employing of the driver IC capable of high-speed data transfer at 3.3 circuit supply voltage makes the gradation printing control easier.

Technical drawing of a component showing top and side views with dimensions.

**Top View Dimensions:**

- Overall length:  $114.2 \pm 0.2$
- Distance from left edge to center line (CL):  $108.16$
- Distance from CL to right edge:  $5.835$
- Distance from left edge to Dot #1280:  $(3.02)$
- Distance from CL to Dot #1:  $5.835$

**Side View Dimensions:**

- Maximum height:  $\text{Max. } 14$
- Feature diameter:  $\phi 10$

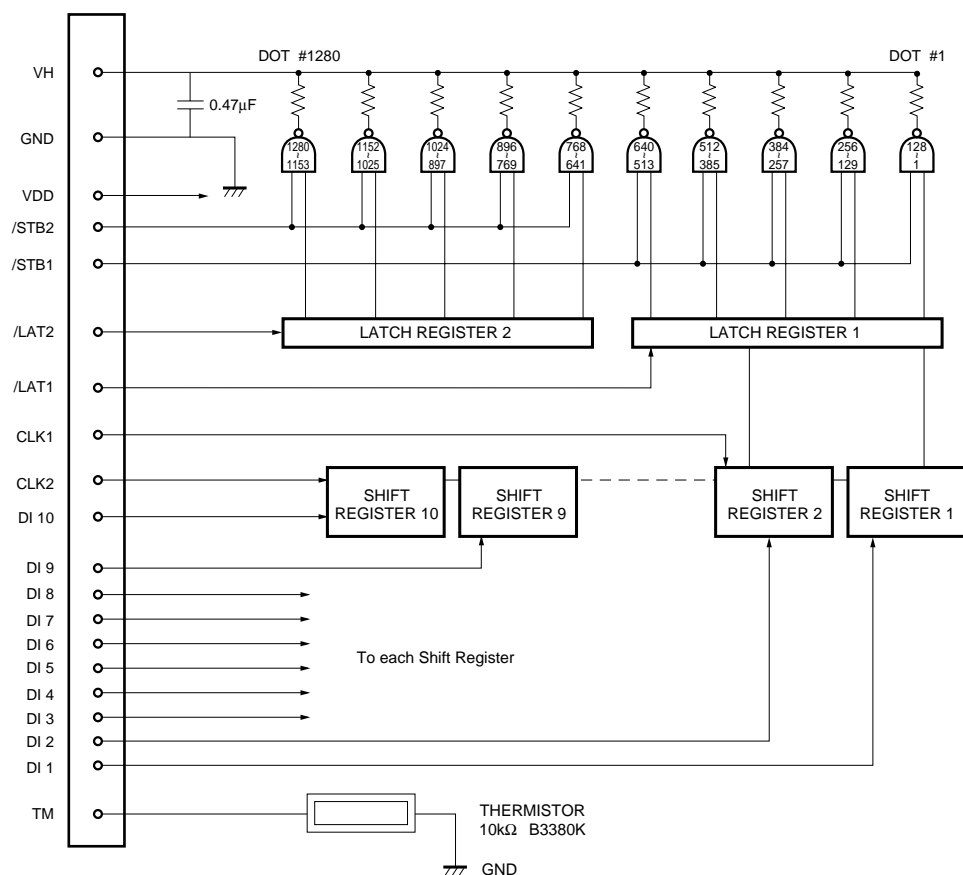
**Labels:**

- Dot #1280
- CL (Center Line)
- Dot #1

**ROHAT**

# Printheads

## ●Equivalent circuit



DI No.	DOT No.	DI No.	DOT No.
10	1280 to 1153	5	640 to 513
9	1152 to 1025	4	512 to 385
8	1024 to 897	3	384 to 257
7	896 to 769	2	256 to 129
6	768 to 641	1	128 to 1

/STB No.	DOT No.
2	1280 to 641
1	640 to 1

Fig.1

## Printheads

### ●Pin assignments

No.	Circuit	No.	Circuit	No.	Circuit
1	GND	2	V <sub>H</sub>	3	V <sub>H</sub>
4	V <sub>H</sub>	5	GND	6	CLK 2
7	GND	8	/LAT 2	9	/STB 2
10	TM	11	DI 10	12	DI 9
13	DI 8	14	DI 7	15	DI 6
16	DI 5	17	DI 4	18	DI 3
19	DI 2	20	DI 1	21	V <sub>DD</sub>
22	/STB 1	23	/LAT 1	24	GND
25	CLK 1	26	GND	27	V <sub>H</sub>
28	V <sub>H</sub>	29	V <sub>H</sub>	30	GND

### ●Timing chart

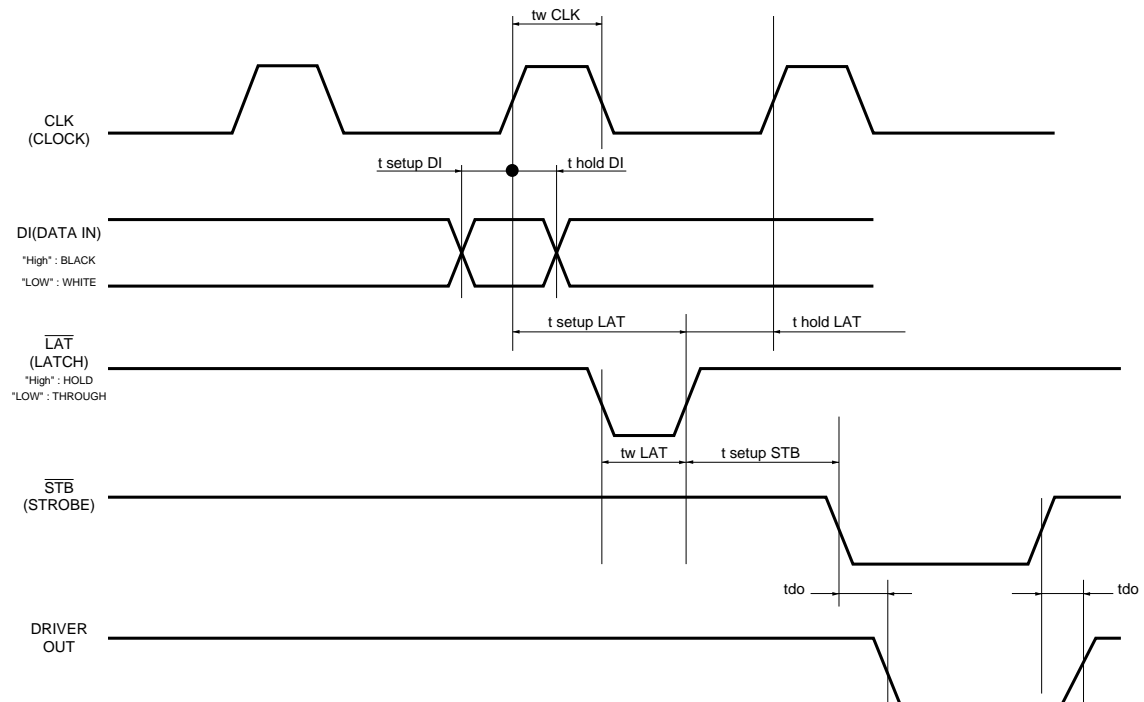


Fig.2

## Printheads

### ●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	108.16	mm
Dot pitch	—	0.0845	mm
Total dot number	—	1280	dots
Average resistance value	Rave	2800	$\Omega$
Applied voltage	V <sub>H</sub>	13.3	V
Applied power	P <sub>o</sub>	0.061	W/dot
Print cycle	SLT	4.5	ms/line
Pulse width	T <sub>ON</sub>	2.25	ms
Maximum number of dots energized simultaneously	—	640	dots
Maximum clock frequency	—	16	MHz
Maximum rolls diameter	—	10	mm
Running life / pulse life	—	2/5×10 <sup>7</sup>	km/pulses
Operating temperature	—	5 to 45	°C

### ●Electrical characteristics

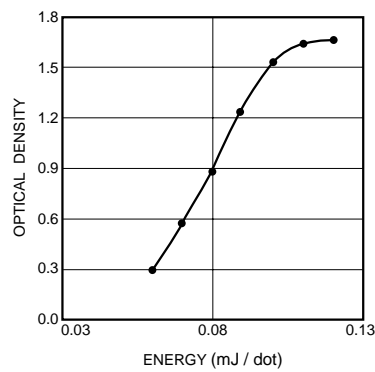


Fig. 3 Representative density curve

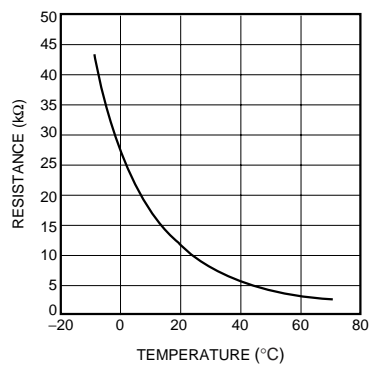


Fig. 4 Thermistor curve

Note ) Direct Thermal Printing (KPT210 OJI)

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