

High speed thermal printhead (300 dots / inch)

NF3004-VA30A

NF-VA30 series are the thermal printheads developed for high-speed / high-resolution printing for the market of bar-code printer & scale-printer, based on "step-free" structure. These printheads realize ultra-highspeed printing with long life & high reliability.

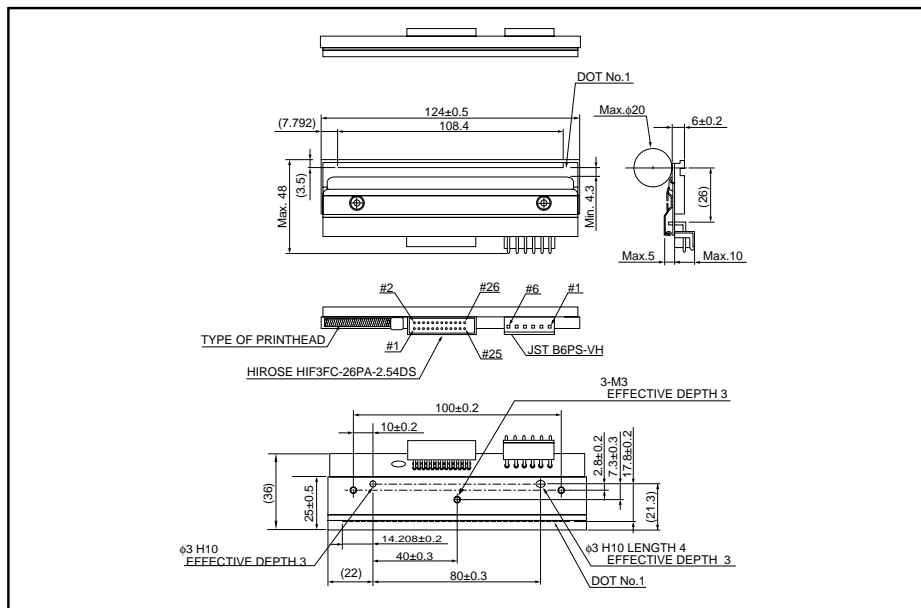
●Applications

Barcode printers
Label printers
Packaging printers
ATM
Ticket printers
Scale printers

●Features

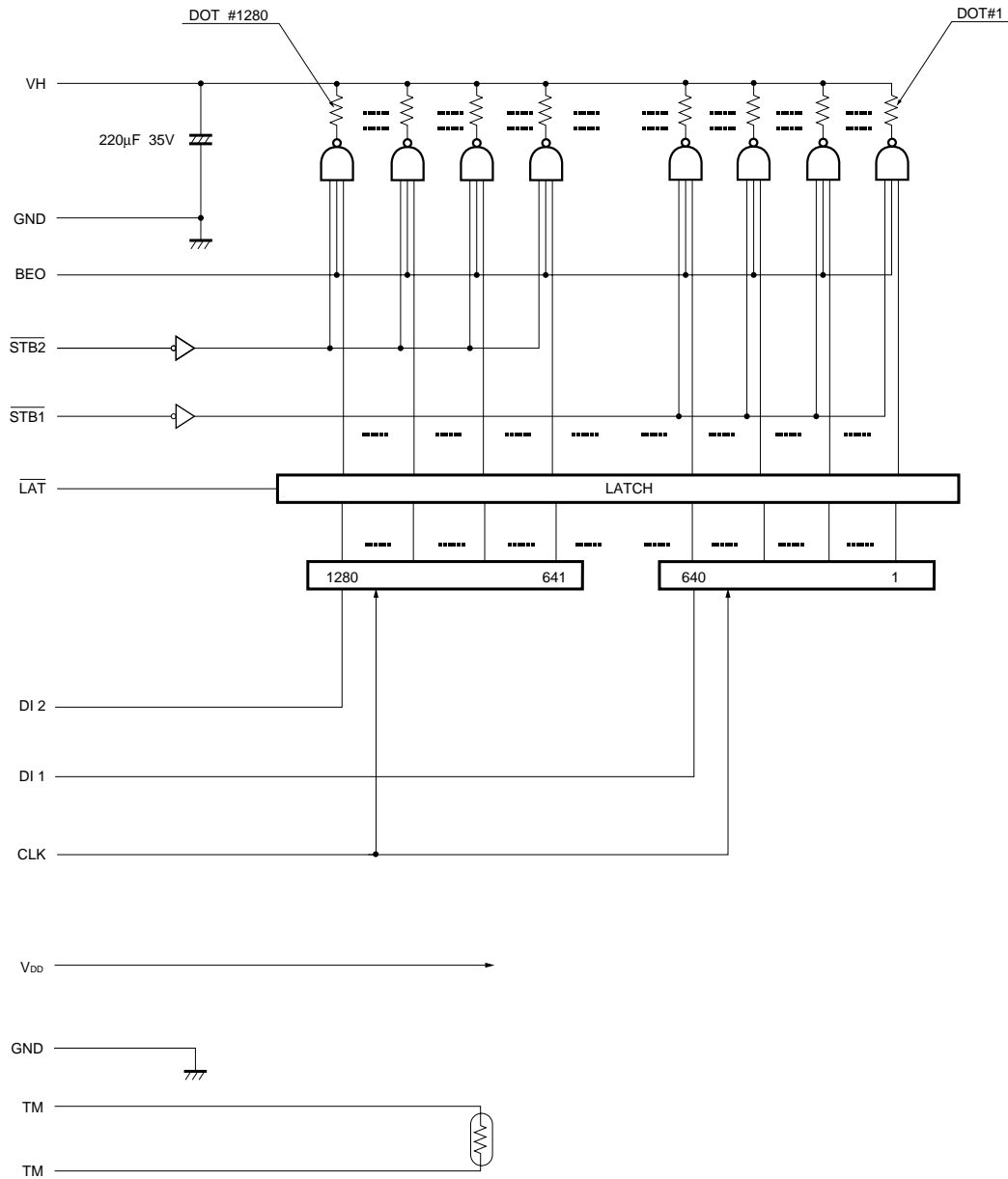
- 1) High dot reproducibility with step-free structure.
- 2) High-hardness protect cote type "W-coat" is employed with 150km abrasion life-time.
- 3) Even without history-control, high-speed printing more than 300mm/s can be achieved at 300dpi with clear print image.
With history-control, 500mm/s printing is also possible at 300dpi.

●External dimensions (Unit : mm)



Note: No heat history control function inside the thermal printhead. External heat history control is required for high speed printing.

●Equivalent circuit



DI No.	DOT No.
DI 2	1280 to 641
DI 1	640 to 1

STB No.	DOT No.
STB2	1280 to 641
STB1	640 to 1

●Pin assignments

HIROSE

No.	Circuit	No.	Circuit
1	V _{DD}	2	BEO
3	GND	4	DI2
5	N.C.	6	CLK
7	$\overline{\text{LAT}}$	8	GND
9	GND	10	DI1
11	N.C.	12	GND
13	V _{DD}	14	$\overline{\text{STB2}}$
15	$\overline{\text{STB1}}$	16	TM
17	TM	18	SENS1
19	SENS2	20	SENS3

JST

No.	Circuit
1	VH
2	VH
3	VH
4	GND
5	GND
6	GND

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	108.4	mm
Dot pitch	–	0.0847	mm
Total dot number	–	1280	dots
Average resistance value	R _{ave}	850	Ω
Applied voltage	V _H	24	V
Applied power	P _O	0.57	W / dot
Print cycle	SLT	0.28	ms
Pulse width	T _{ON}	0.31	ms
Maximum number of dots energized simultaneously	–	1280	dots
Maximum clock frequency	–	10	MHz
Maximum roller diameter	–	φ20	mm
Running life / pulse life	–	150 / 10 ⁸	km / pulses
Operating temperature	–	5 to 45	°C

Notes

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