

Thick film thermal printhead (8 dots / mm)

KD2004-DC10A

The KD2004-DC10A is a 24 V standard thick film thermal printhead with a printing speed up to 6 inches / s that has been developed mainly for label printer use.

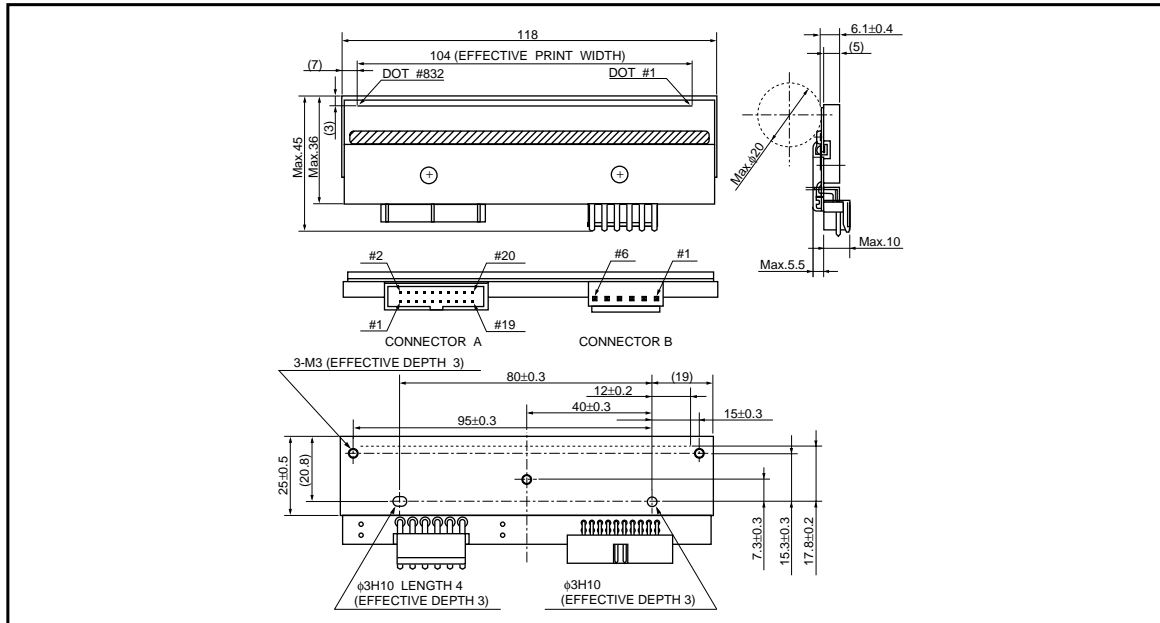
●Applications

- High speed label printer
- High speed bar code printer
- High speed ticket printer
- Various high speed terminal printers

●Features

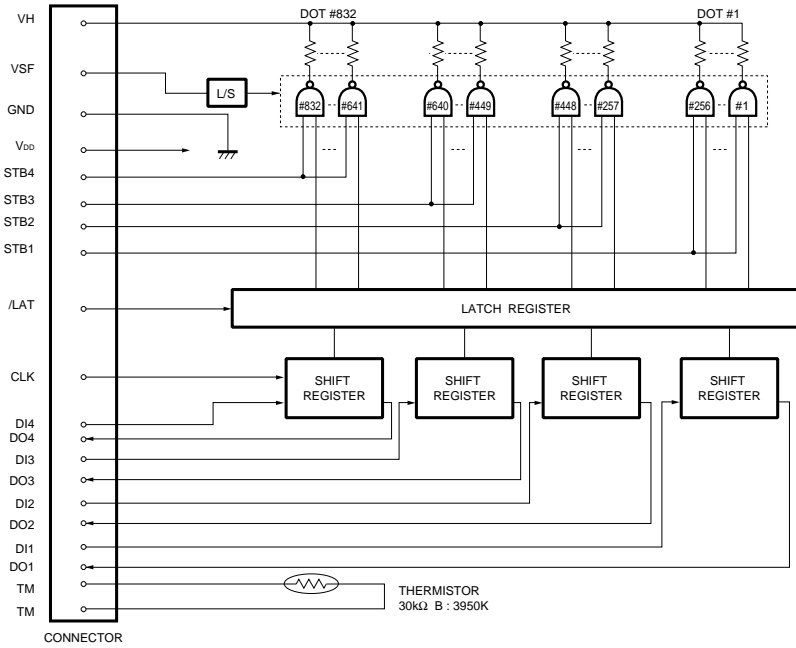
- 1) Newly developed thick-film fast response thermal element is employed for this series and 6 inches / s or 150mm / s is possible without thermal history control. It is possible to print 10 inches / s or 250mm / s if external thermal history control is used.
- 2) 150km life realized by attributing durable new protection film.
- 3) New partial glaze construction makes it compatible with the thermal transfer application.

●External dimensions (Unit : mm)



Printheads

●Equivalent circuits



VSF : Usually VSF and VH are connected. When measuring R value of Heat-element , VSF and VH should be separated.

DI No.	DOT No.	STB No.	DOT No.
DI1	1 to 256	STB1	1 to 256
DI2	257 to 448	STB2	257 to 448
DI3	449 to 640	STB3	449 to 640
DI4	641 to 832	STB4	641 to 832

Fig.1

●Pin assignments

CONNECTOR A

No.	Circuit	No.	Circuit
1	GND	11	TM
2	VSF	12	TM
3	GND	13	DI3
4	V _{DD}	14	DO3
5	STB4	15	DI2
6	CLK	16	DO2
7	DI4	17	STB2
8	DO4	18	STB1
9	STB3	19	DI1
10	LAT	20	DO1

CONNECTOR B

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

Printheads

●Timing chart

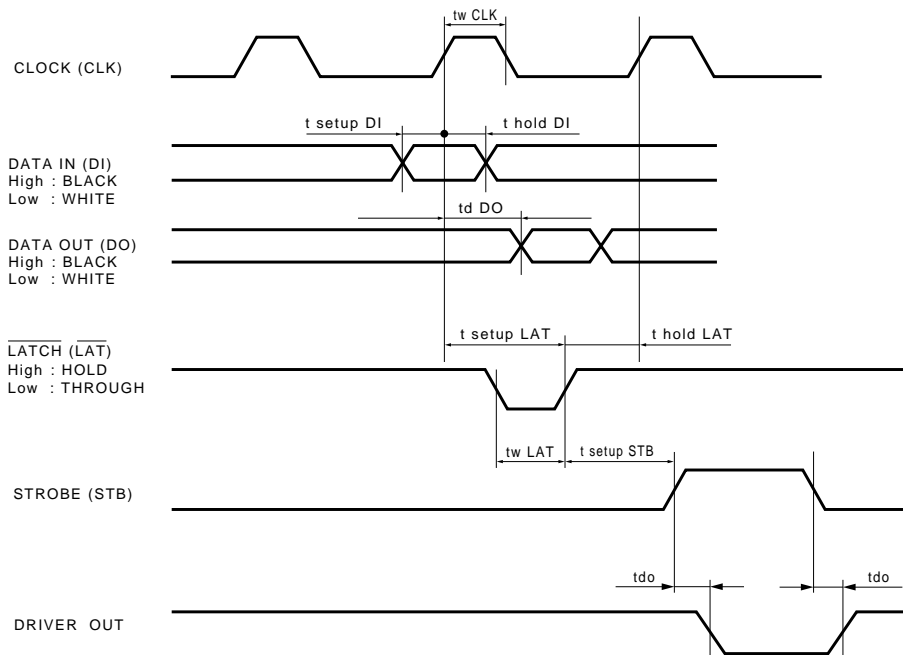


Fig.2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	-	104	mm
Dot pitch	-	0.125	mm
Total dot number	-	832	dots
Average resistance value	Rave	650	Ω
Applied voltage	V_H	24	V
Applied power	P_o	0.77	W / dot
Print cycle	SLT	0.82	ms
Maximum number of dots energized simultaneously	-	448	dots
Maximum clock frequency	-	12	MHz
Maximum roller diameter	-	$\phi 20.0$	mm
Running life / pulse life	-	150 / (1×10^8)	km / pulses
Operating temperature	-	5 to 45	$^{\circ}\text{C}$

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