

Thick film thermal printhead

KD2006-DC10A

The KD2006-DC10A is a 24V standard thick film thermal printhead with a printing speed up to 6 inches / s that has been developed mainly for label printer use.

●Applications

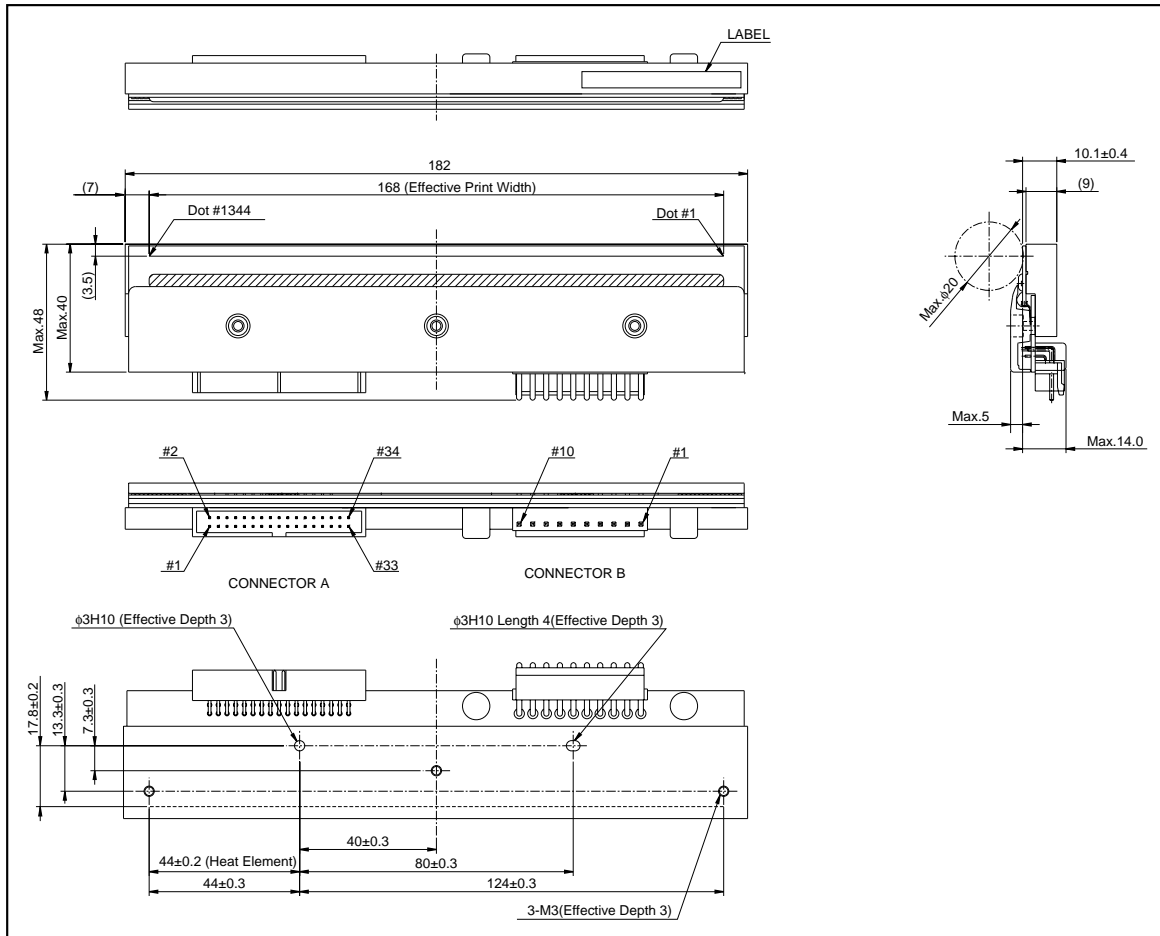
High speed label printer
High speed bar code printer
High speed ticket printer
Various high speed terminal printers

●Features

- 1) Newly developed thick-film fast response thermal element is employed for this series and 6 inches/s or 150 mm/s is possible without thermal history control. It is possible to print 10 inches/s or 250 mm/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.

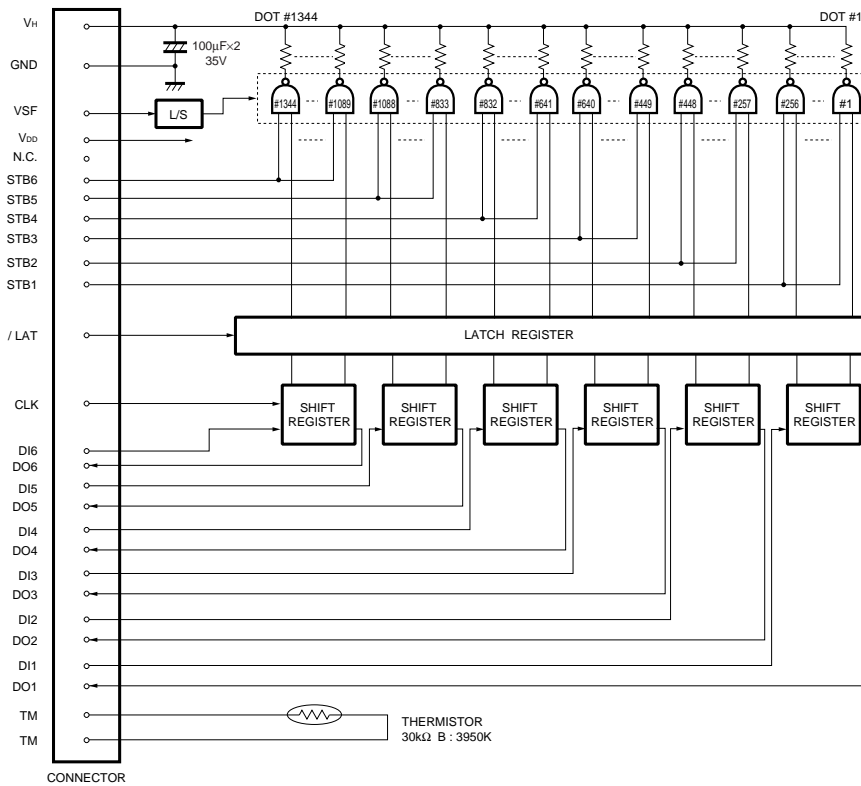
Printhead

●External dimensions (Unit : mm)



Printhead

●Equivalent circuit



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

DI No.	DOT No.
DI1	1 to 256
DI2	257 to 448
DI3	449 to 640
DI4	641 to 832
DI5	833 to 1088
DI6	1089 to 1344

STB No.	DOT No.
STB1	1 to 256
STB2	257 to 448
STB3	449 to 640
STB4	641 to 832
STB5	833 to 1088
STB6	1089 to 1344

Fig.1

Printhead

●Pin assignments

CONNECTOR A				CONNECTOR B	
No.	Circuit	No.	Circuit	No.	Circuit
1	GND	18	STB6	1	V _H
2	V _{SF}	19	CLK	2	V _H
3	GND	20	/ LAT	3	V _H
4	V _{DD}	21	TM	4	V _H
5	NC	22	TM	5	V _H
6	NC	23	STB3	6	GND
7	NC	24	STB4	7	GND
8	NC	25	STB1	8	GND
9	NC	26	STB2	9	GND
10	NC	27	DI4	10	GND
11	DI6	28	DO4		
12	DO6	29	DI3		
13	DI5	30	DO3		
14	DO5	31	DI2		
15	NC	32	DO2		
16	NC	33	DI1		
17	STB5	34	DO1		

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	168	mm
Dot pitch	–	0.125	mm
Total dot number	–	1344	dots
Average resistance value	R _{ave}	650	Ω
Applied voltage	V _H	24	V
Applied power	P _o	0.75	W/dot
Print cycle	SLT	0.82	ms
Maximum number of dots energized simultaneously	–	704	dots
Maximum clock frequency	–	8	MHz
Maximum roller diameter	–	φ20.0	mm
Running life / pulse life	–	150/(1×10 ⁸)	km/pulses
Operating temperature	–	5 to 45	°C

Printhead

●Data sheets

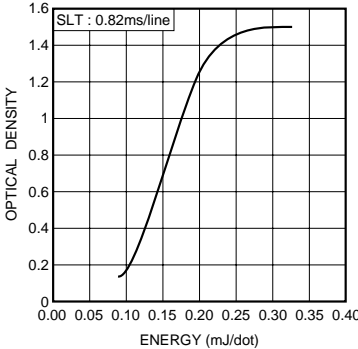


Fig.2 Representative density curve

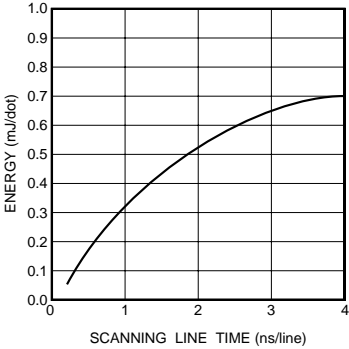


Fig.3 Maximum energy curve

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