Thick Film Thermal Printhead (300dpi)

KD3004-DC10A

KD3004-DC10A is developing type of GL40 series which are developed mainly for label printers.
We have adopted low coefficient of abrasion and conductive protection coat to GL40 series which are possible for high speed and good printing quality.
That is KD3004-DC10A which is 24V standard thick film thermal print head with high speed, high quality of printing, high durability, long life, and strong resistance to abration.

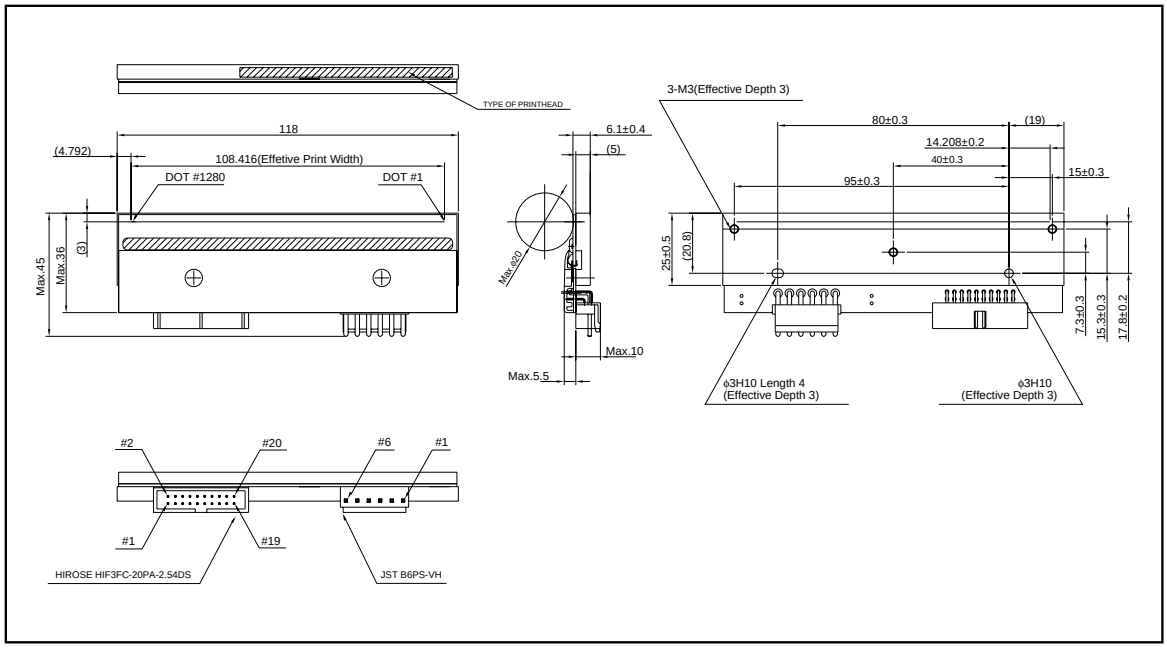
●Applications

High speed label printer
Food label printer
High speed ticket printer
High speed terminal printer

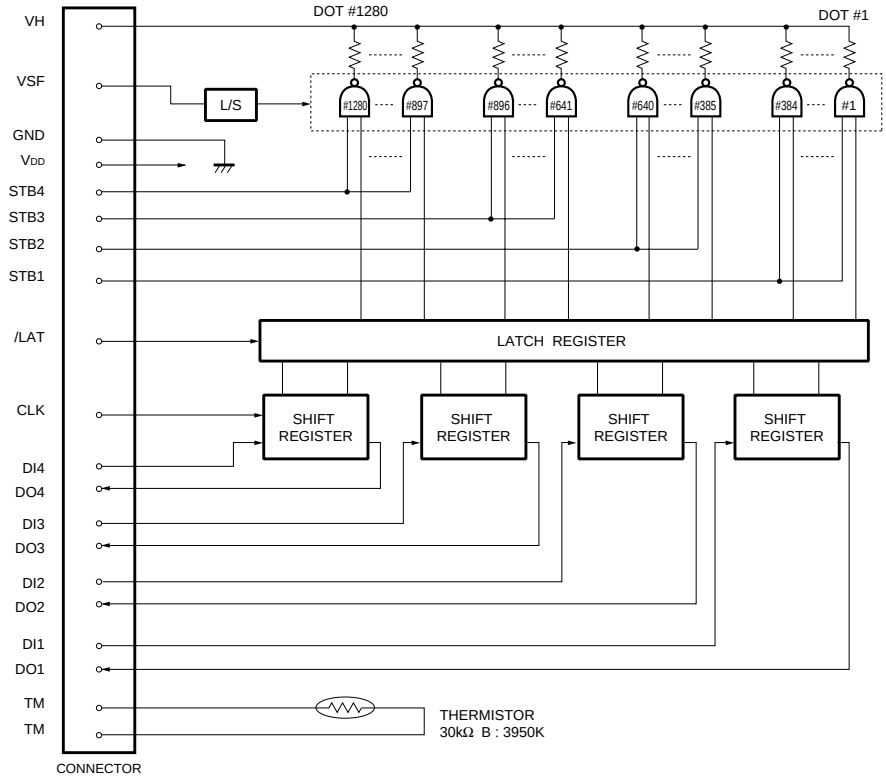
●Features

1) Perform 150km life time adopting new protective coat.
(Perform three times life time by coefficient of abrasion which is about is about 1/10 of current mass-producing coat.)
2) Build in thermal high speeded heater and perform high printing 4 IPS. (100mm / s)
3) Available for thermal transfer printing by adopting specific partial glaze.

●External dimensions (Unit : mm)



●Equivalent circuit



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

DI No.	DOT No.
DI1	1 to 384
DI2	385 to 640
DI3	641 to 896
DI4	897 to 1280

STB No.	DOT No.
STB1	1 to 384
STB2	385 to 640
STB3	641 to 896
STB4	897 to 1280

Fig. 1

●Pin configuration

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	$\overline{LAT}$	20	DO1

CONNECTOR B

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

●**Timing chart**

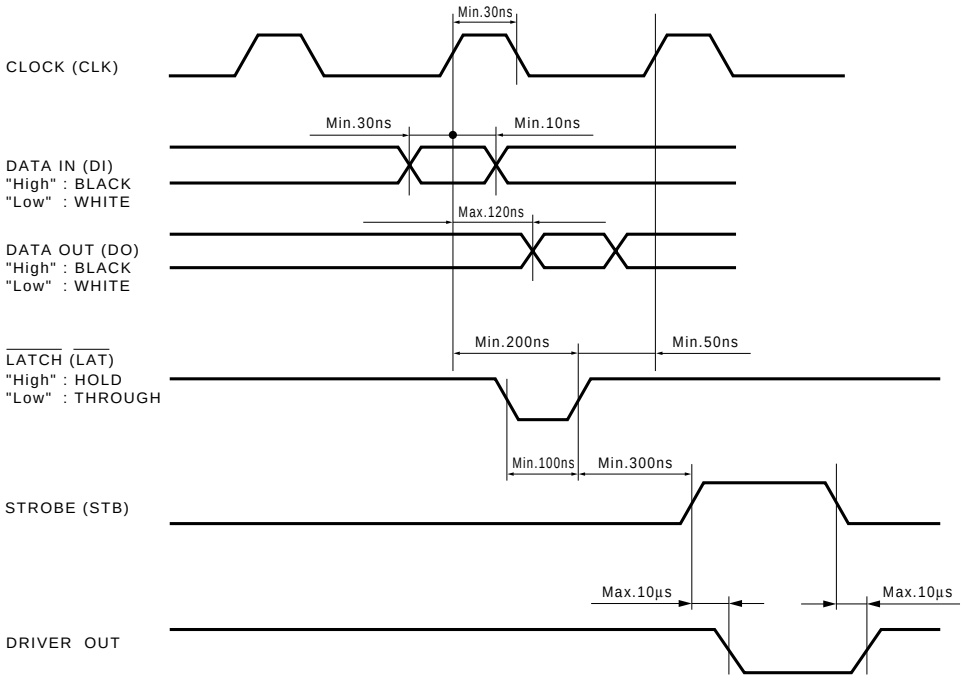


Fig.2

●**Characteristics**

Parameter	Symbol	Typ.	Unit
Effective printing width	–	108.42	mm
Dot pitch	–	0.0847	mm
Total dot number	–	1280	dots
Average resistance value	Rave	1000	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.51	W / dot
Print cycle	SLT	0.83	ms
Maximum number of dots energized simultaneously	–	1280	dots
Maximum clock frequency	–	12	MHz
Maximum roller diameter	–	ϕ20.0	mm
Running life / pulse life	–	150 / 1×10^8	km / pulses
Operating temperature	–	5 to 45	°C

●**Data sheet**

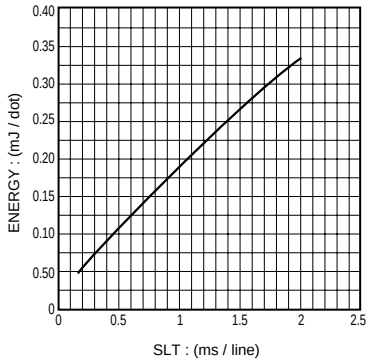


Fig.3 Maximum energy curve

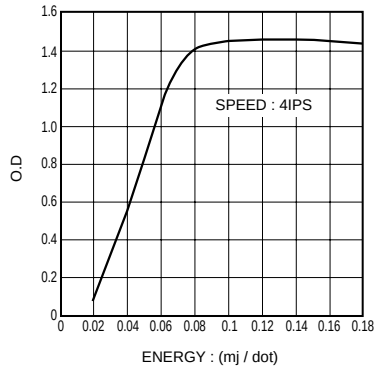


Fig.4 Representative density curve

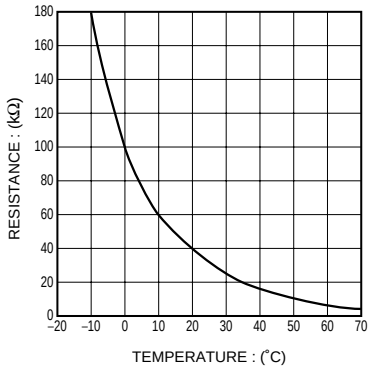


Fig.5 Thermistor curve

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