

# Thick film thermal printhead (with thermal historical control)

## KD3004-DC70A

DC70 series has our own internally developed heat-history control function.

This product is best suited for applications which require 24 hours operation like factory production lines.

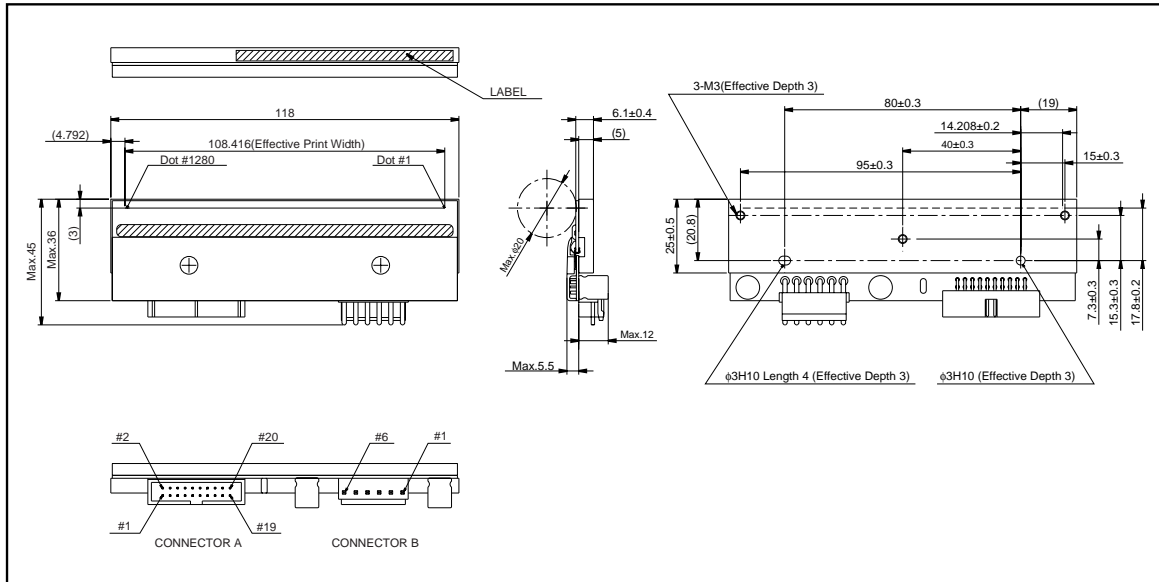
### ●Applications

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

### ●Features

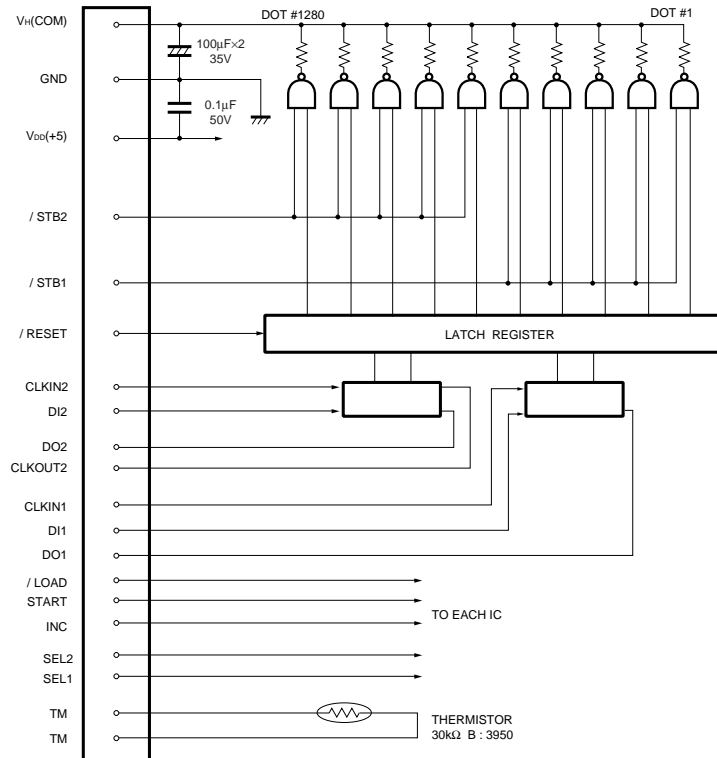
- 1) Newly developed thick-film fast response thermal element and driver LSI with the function of thermal history control which is added the future history control are employed for this series. It is possible to print with super high speed of 10 inches / s or 250 mm / s.
- 2) 150km life realized by attributing durable new protection film.
- 3) New partial glaze construction makes it compatible with the thermal transfer application.

### ●External dimensions (Unit : mm)



Printhead

●Equivalent circuit



DI No.	DOT No.	/ STB No.	DOT No.	CLK No.	DOT No.
DI2	1280~641	/ STB2	1280~641	CLKIN2	1280~641
DI1	640~ 1	/ STB1	640~ 1	CLKIN1	640~ 1

Fig.1

●Pin assignments

CONNECTOR A	
No.	Circuit
1	V <sub>DD</sub>
2	V <sub>DD</sub>
3	SEL2
4	SEL1
5	CLKIN2 (CP)
6	NC
7	DI2
8	DI1
9	INC
10	/ LOAD
11	/ RESET
12	START
13	DO1
14	DO2
15	TM
16	TM
17	/ STB2
18	/ STB1
19	CLKOUT2
20	CLKIN1

CONNECTOR B	
No.	Circuit
1	V <sub>H</sub> (COM)
2	V <sub>H</sub> (COM)
3	V <sub>H</sub> (COM)
4	GND
5	GND
6	GND

Printhead

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	108.416	mm
Dot pitch	–	0.0847	mm
Total dot number	–	1280	dots
Average resistance value	Rave	1000	Ω
Applied voltage	V <sub>H</sub>	24	V
Applied power	P <sub>o</sub>	0.51	W/dot
Print cycle	SLT	0.41	ms
Maximum number of dots energized simultaneously	–	1280	dots
Maximum clock frequency	–	8	MHz
Maximum roller diameter	–	φ20.0	mm
Running life / pulse life	–	150/(1×10 <sup>8</sup> )	km/pulses
Operating temperature	–	5 to 45	°C

●Data sheets

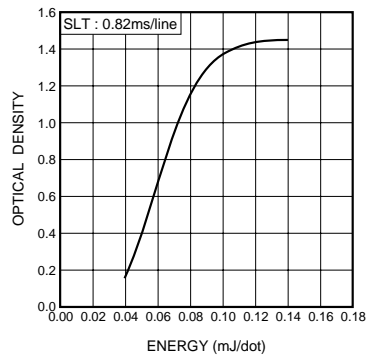


Fig.2 Representative density curve

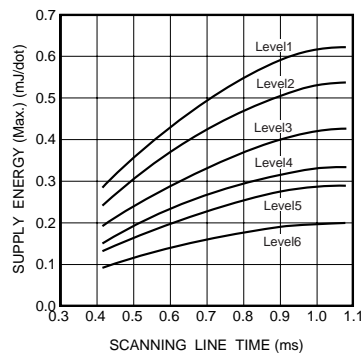


Fig.3 Maximum energy curve

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