

# Thick film thermal printhead (with thermal historical control)

## KD2002-DC72A

DC72 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.

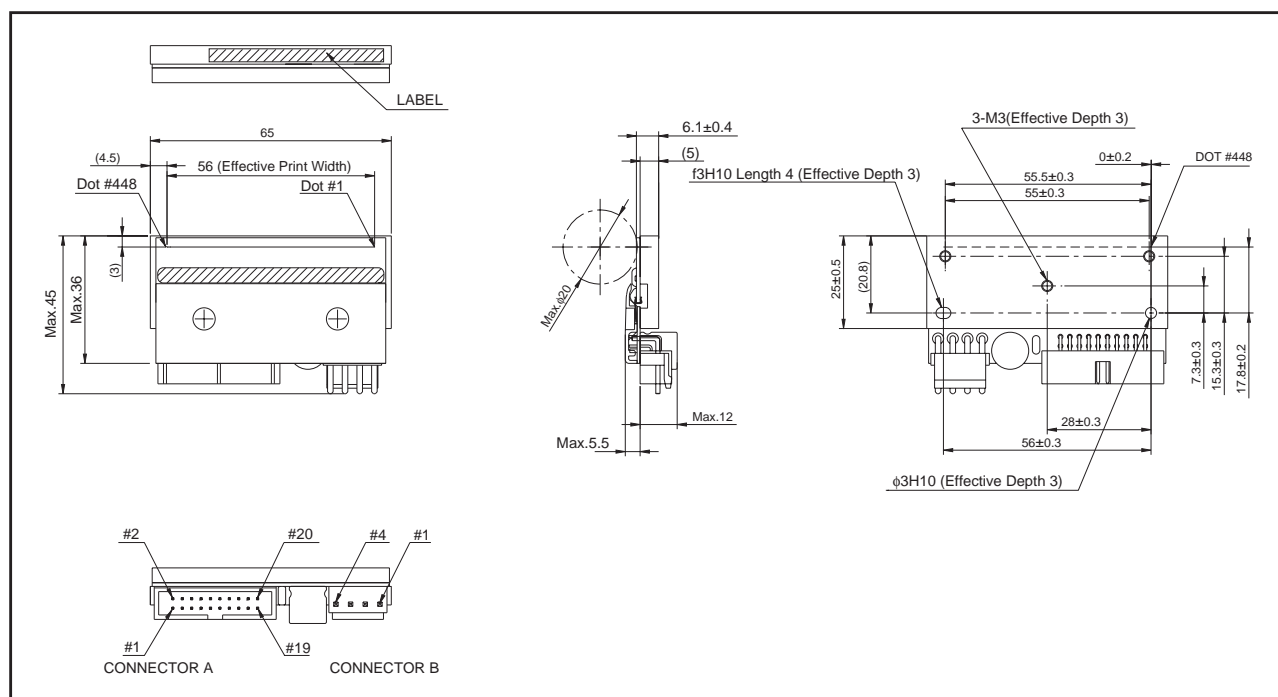
### ●Applications

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

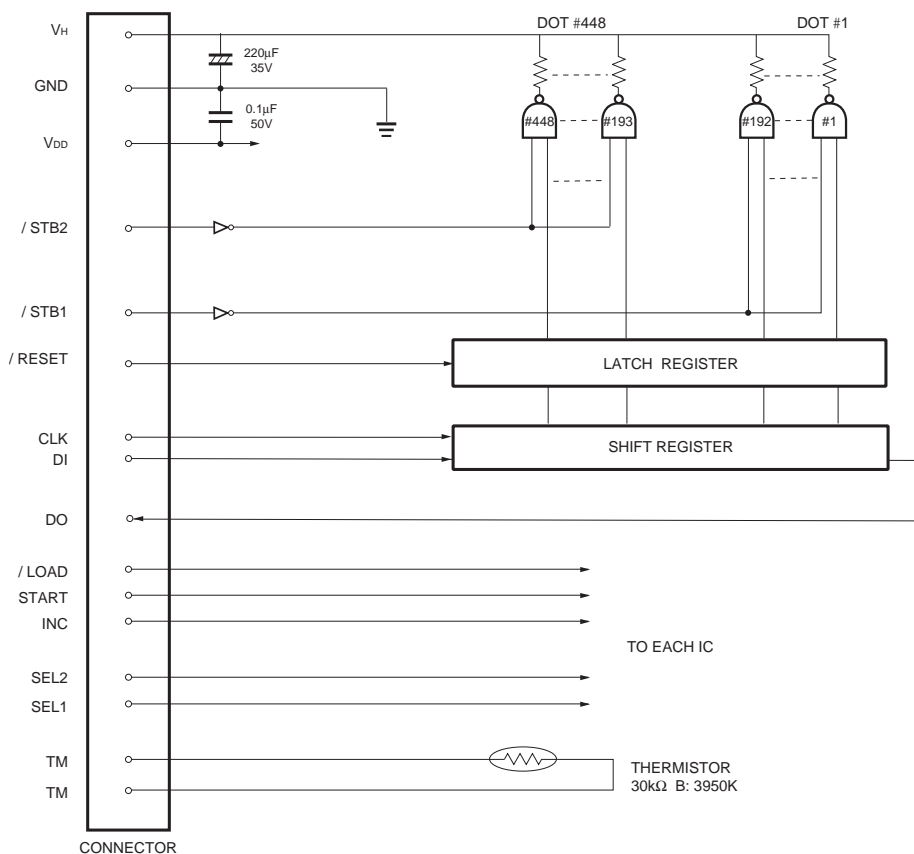
### ●Features

- 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 250mm / s.
- 2) 150km life realized by attributing durable new protection film.
- 3) New partial glaze construction makes it compatible with the thermal transfer application.

### ●Dimensions (Unit : mm)



## ●Equivalent circuit



DI No.	DOT No.
DI	448 to 1

/ STB No.	DOT No.
/ STB2	448 to 193
/ STB1	192 to 1

## ●Pin assignments

CONNECTOR A

No.	Circuit	No.	Circuit
1	V <sub>DD</sub>	11	/ RESET
2	V <sub>DD</sub>	12	START
3	SEL2	13	DO
4	SEL1	14	NC
5	CLK (CP)	15	TM
6	NC	16	TM
7	DI	17	/ STB 2
8	NC	18	/ STB 1
9	INC	19	NC
10	/ LOAD	20	NC

CONNECTOR B

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

## ●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	56	mm
Dot pitch	—	0.125	mm
Total dot number	—	448	dots
Average resistance value	Rave	550	$\Omega$
Applied voltage	V <sub>H</sub>	24	V
Applied power	P <sub>o</sub>	0.83	W/dot
Print cycle	SLT	0.490	ms
Maximum number of dots energized simultaneously	—	448	dots
Maximum clock frequency	—	8	MHz
Maximum roller diameter	—	$\phi 20.0$	mm
Running life / pulse life	—	150/(1×10 <sup>8</sup> )	km/pulses
Operating temperature	—	5 to 45	°C

## ●Data sheets

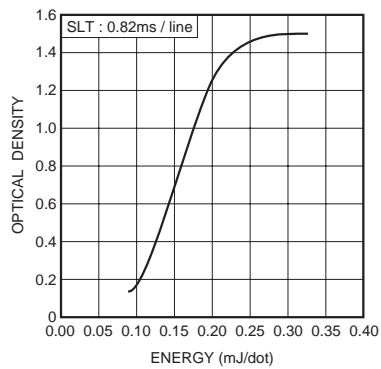


Fig.2 Representative density curve

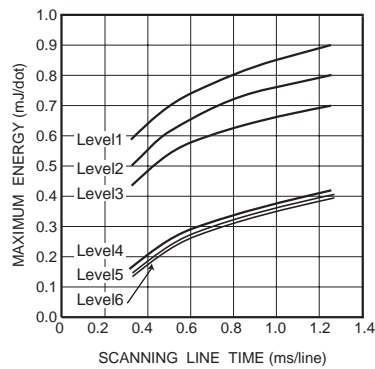


Fig.3 Maximum energy curve

## Appendix

### Notes

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