

# Thick film thermal printhead (11.8 dots / mm) KD3008-CF10A

The KD3008-CF10A is a A4-size thick-film thermal printhead, developed mainly for handy printers for personal computers.

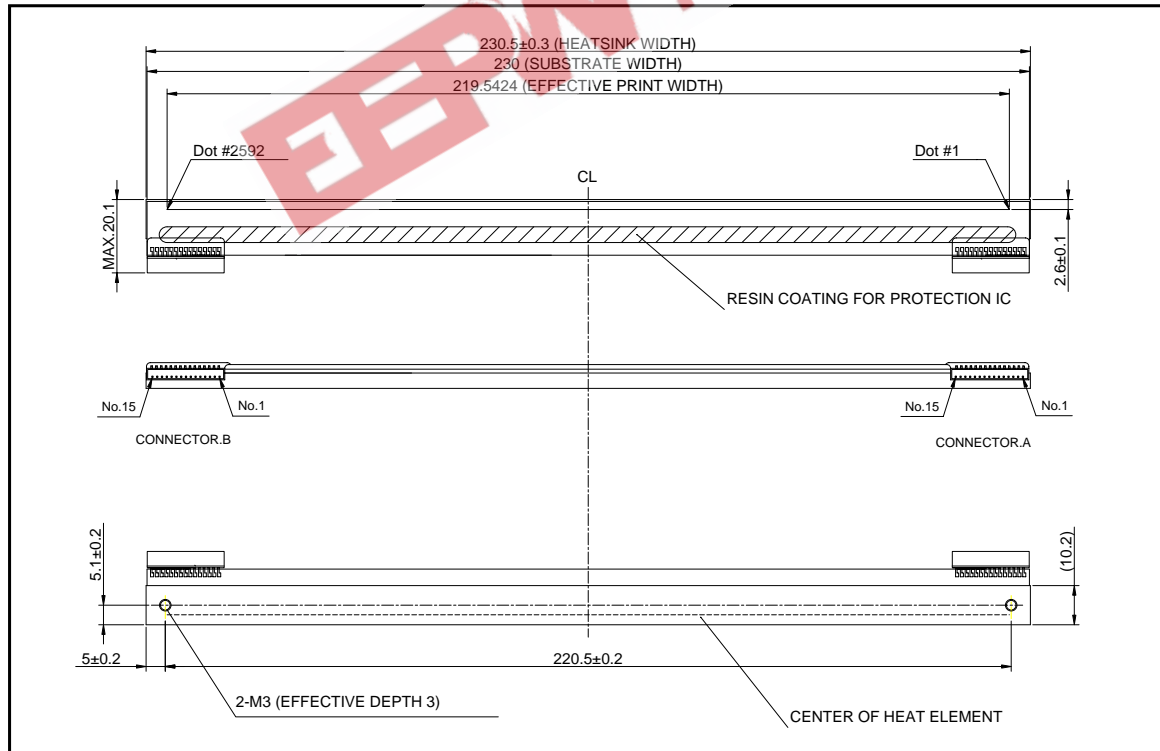
## ●Applications

Plain-paper printers  
Low speed ticket vendors  
Measuring terminal printers

## ●Features

- 1) A new pin connector structure greatly reduces the size and weight.
- 2) A newly developed 144-bit IC levels the strobe partition and reduces the noise level.
- 3) One rank resistance value of  $1250\Omega \pm 3\%$  eliminates provides good printing quality on rough paper.

## ●External dimensions (Unit : mm)



Printheads

●Equivalent circuit

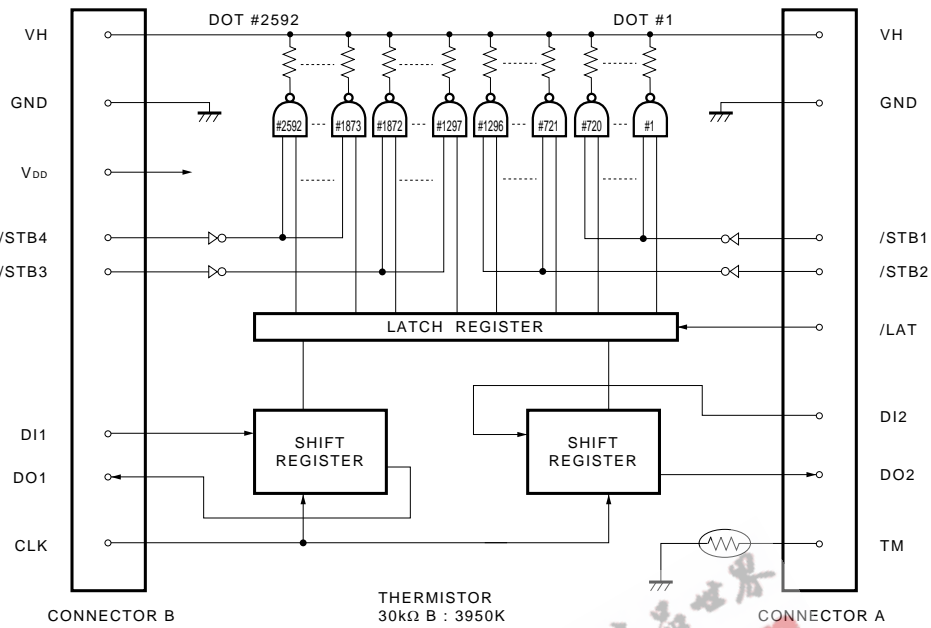


Fig.1

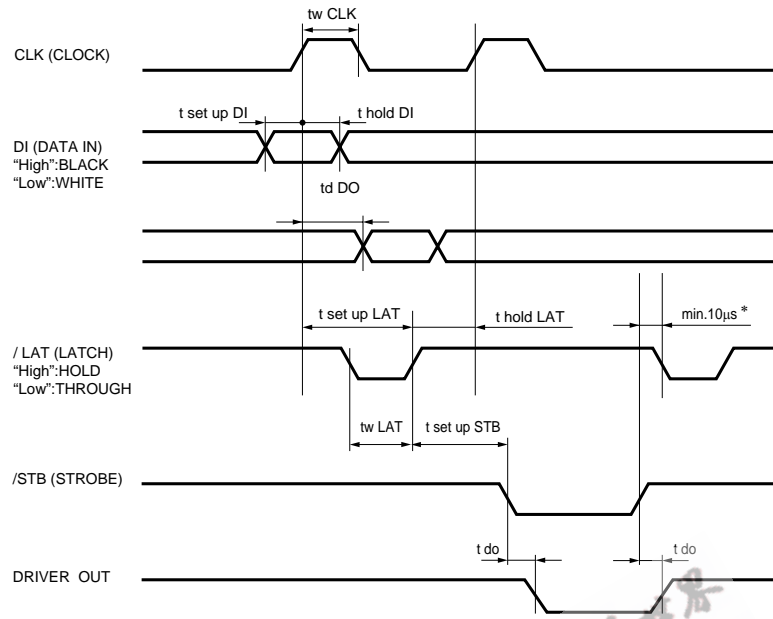
●Pin assignments

CONNECTOR B	
No.	Circuit
1	GND
2	GND
3	GND
4	GND
5	V <sub>DD</sub>
6	/STB3
7	/STB4
8	CLK
9	DI1
10	DO1
11	VH
12	VH
13	VH
14	VH
15	VH

CONNECTOR A	
No.	Circuit
1	VH
2	VH
3	VH
4	VH
5	DI2
6	DO2
7	/LAT
8	/STB1
9	/STB2
10	TM
11	GND
12	GND
13	GND
14	GND
15	GND

Printheads

●Timing chart



\* If delay time for Driver Out can not be secured enough, there is a possibility that  $V_H$  would fluctuate greatly. Please design the circuit so that  $V_H$  does not exceed peak voltage ( $V_p$ ).

Fig.2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	-	219.542	mm
Dot pitch	-	0.0847	mm
Total dot number	-	2592	dots
Average resistance value	Rave	1250	$\Omega$
Applied voltage	$V_H$	24.0	V
Applied power	$P_o$	0.23	W / dot
Print cycle	SLT	1.11	ms
Pulse width	$T_{ON}$	0.51	ms
Maximum number of dots energized simultaneously	-	1296	dots
Maximum clock frequency	-	16	MHz
Maximum roller diameter	-	$\phi 20.0$	mm
Running life / pulse life	-	$50 / 1 \times 10^8$	km / pulses
Operating temperature	-	5 to 45	$^{\circ}\text{C}$

Printheads

●Electrical characteristic curves

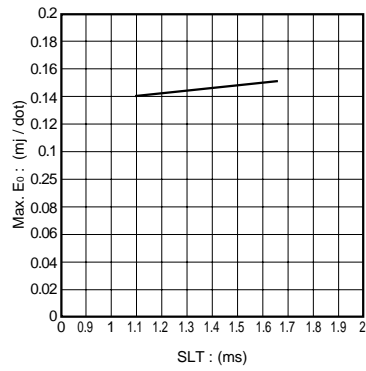


Fig.3 Adaptive speed chart

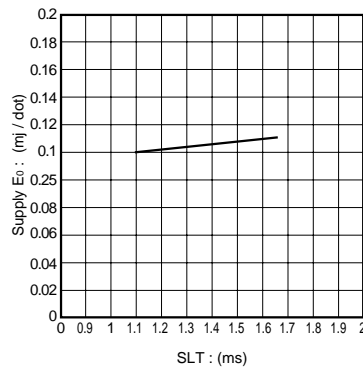


Fig.4 Maximum energy curve

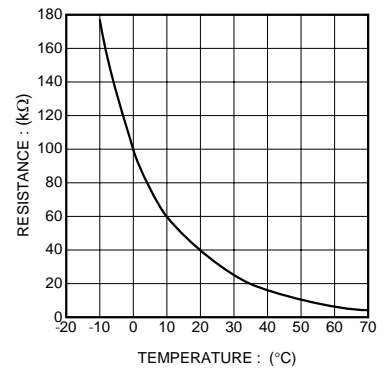


Fig. 5 Thermistor curve

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