

# Compact low speed thick film thermal printhead (8 dots / mm)

## KF2004-GH10A

The KF2004-GH10A is a compact and lightweight thick-film thermal printhead with a printing speed of 50mm / second, developed mainly for ECRs.

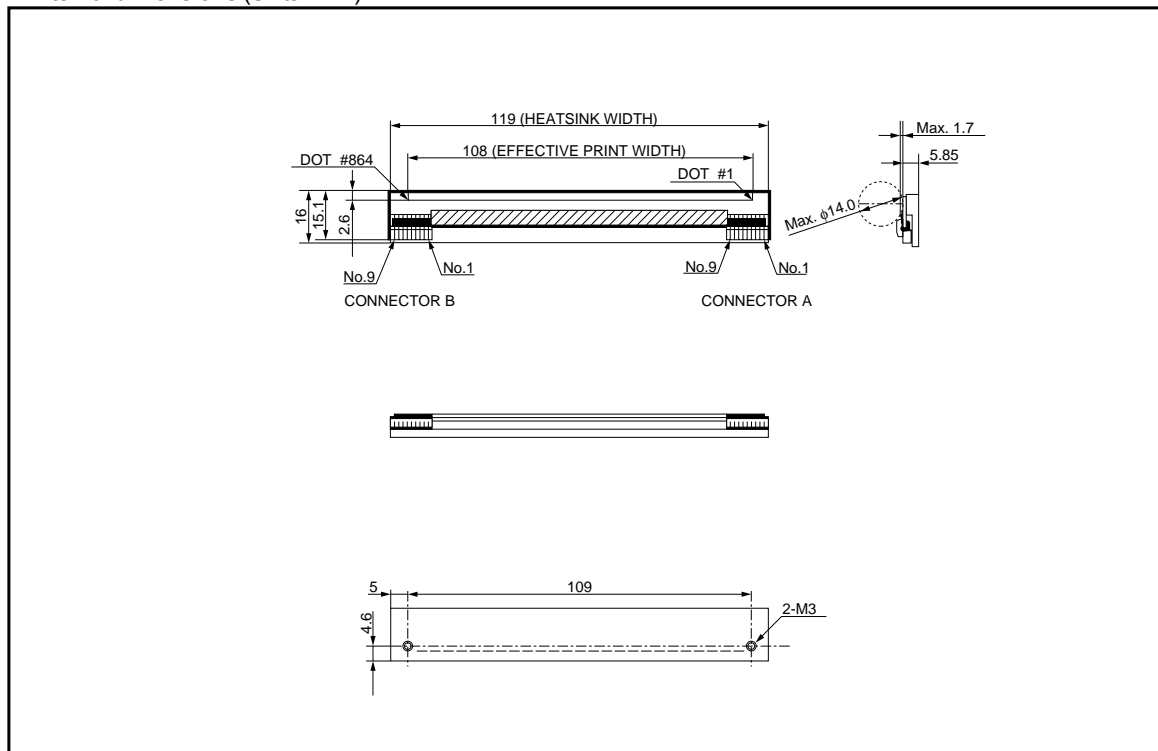
### ●Applications

Cash registers  
Label printers  
Receipt printers  
General purpose compact 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  $1500\Omega \pm 3\%$  eliminates the inconvenience of rank selection.
- 4) 2-inch, 3-inch and 4-inch series are available.

### ●External dimensions (Units : mm)



Printheads

●Equivalent circuit

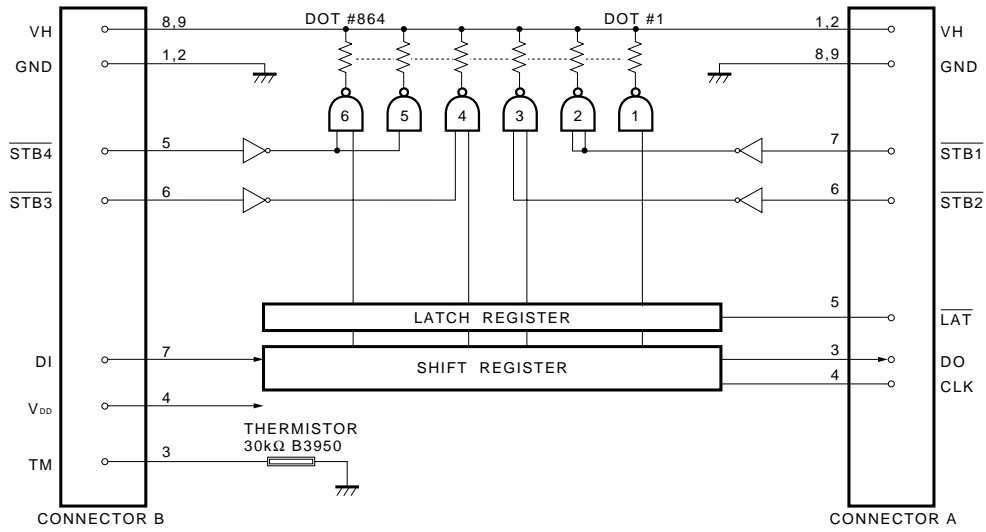


Fig.1

●Pin assignments

CONNECTOR B	
No.	Circuit
1	GND
2	GND
3	TM
4	V <sub>DD</sub>
5	STB4
6	STB3
7	DI
8	VH
9	VH

CONNECTOR A	
No.	Circuit
1	VH
2	VH
3	DO
4	CLK
5	LAT
6	STB2
7	STB1
8	GND
9	GND

## Printheads

### ●Timing chart

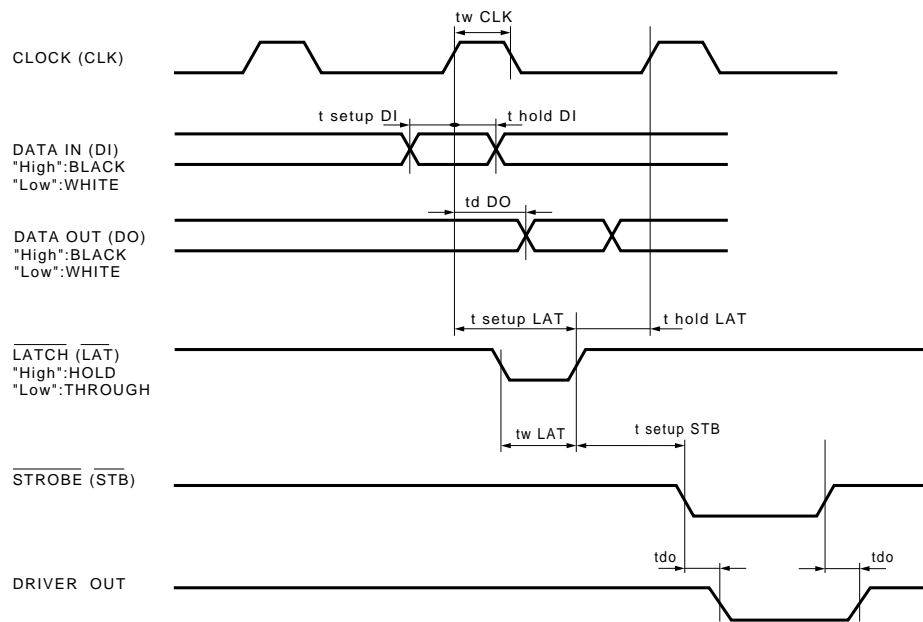


Fig.2

### ●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	108.0	mm
Dot pitch	–	0.125	mm
Total dot number	–	864	dots
Average resistance value	Rave	1500	$\Omega$
Applied voltage	$V_H$	24.0	V
Applied power	$P_O$	0.30	W/dot
Print cycle	SLT	2.5	ms
Pulse width	$T_{ON}$	0.73	ms
Maximum number of dots energized simultaneously	–	432	dots
Maximum clock frequency	–	4	MHz
Maximum roller diameter	–	$\phi 14.0$	mm
Running life / pulse life	–	$50/5 \times 10^7$	km/pulses
Operating temperature	–	5~45	$^{\circ}\text{C}$

Printheads

●Electrical characteristic curves

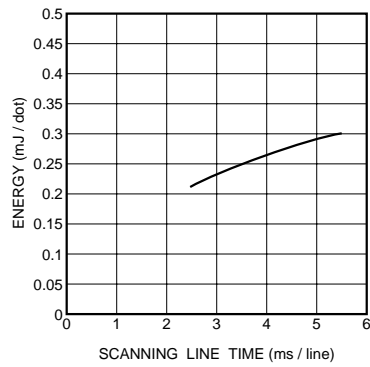


Fig.3 Adaptive speed chart

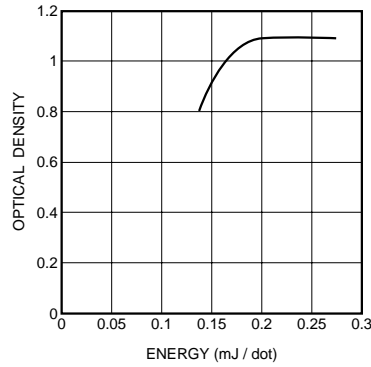


Fig.4 Representative density curve

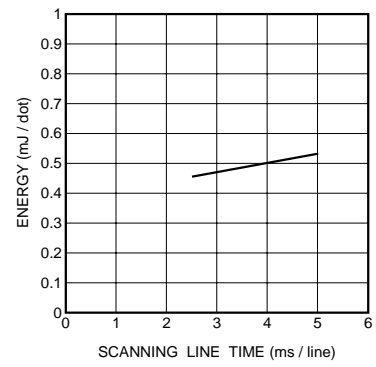


Fig.5 Maximum energy curve

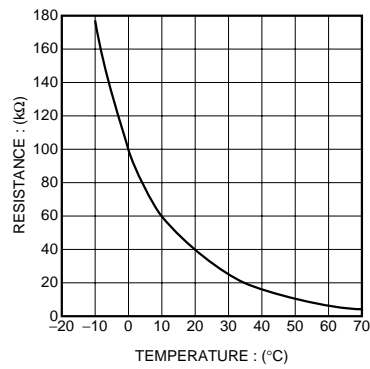


Fig.6 Thermistor curve