

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

KF2003-GH10A

The KF2003-GH10A is a compact and lightweight thick-film thermal printhead with a printing speed of 50mm / second, developed mainly for ECRs.

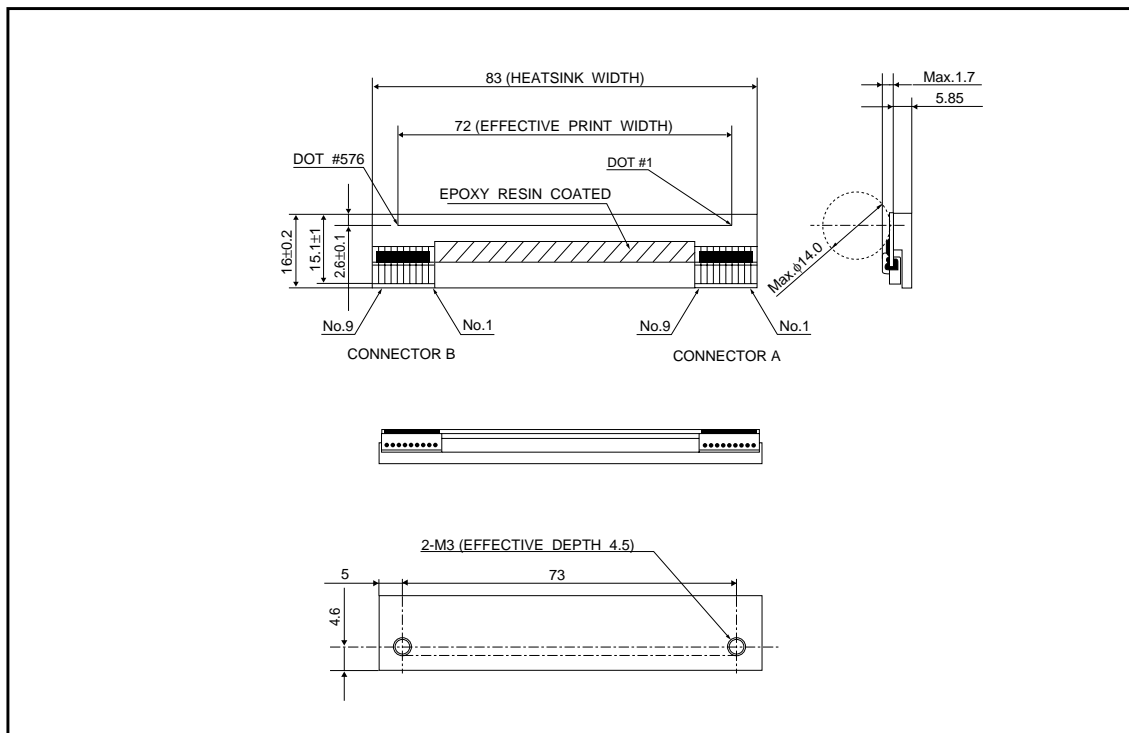
●Applications

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

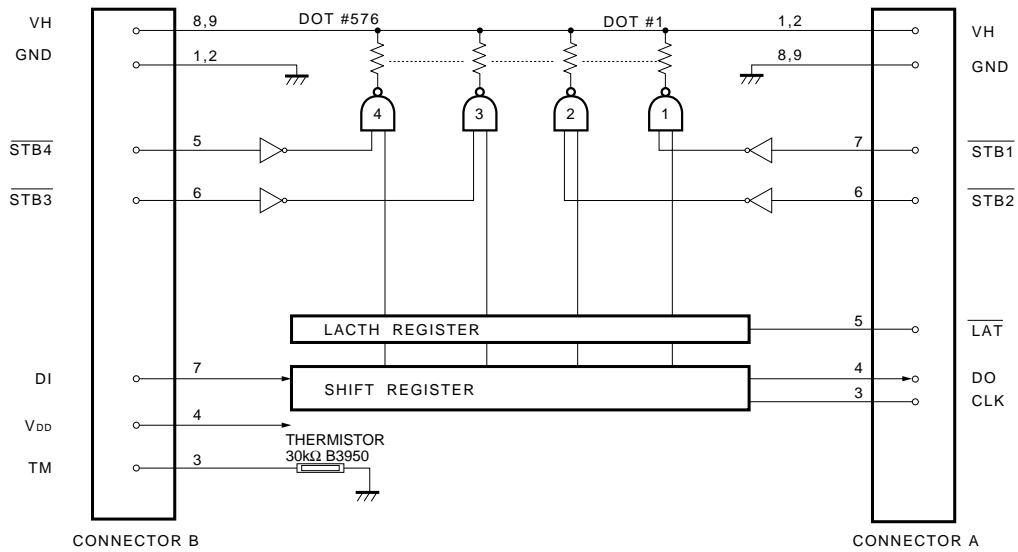


Fig.1

●Pin assignments

CONNECTOR B	
No.	Circuit
1	GND
2	GND
3	TM
4	V _{DD}
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

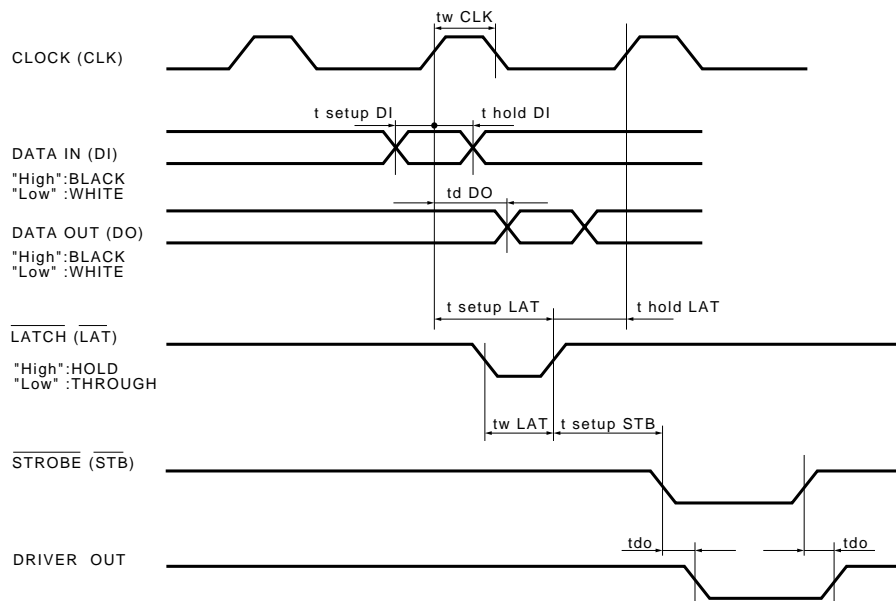


Fig.2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	72.0	mm
Dot pitch	–	0.125	mm
Total dot number	–	576	dots
Average resistance value	Rave	1500	Ω
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	–	288	dots
Maximum clock frequency	–	4	MHz
Maximum roller diameter	–	ϕ 14.0	mm
Running life / pulse life	–	50/5 \times 10 ⁷	km/pulses
Operating temperature	–	5~45	$^{\circ}$ C

Printheads

● Electrical characteristic curves

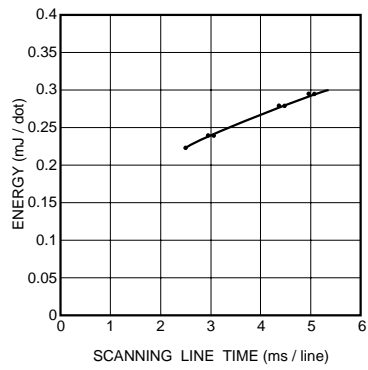


Fig. 3 Adaptive speed chart

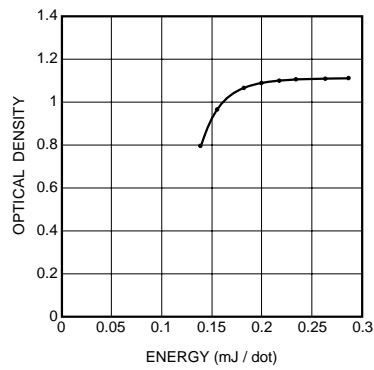


Fig. 4 Representative density curve

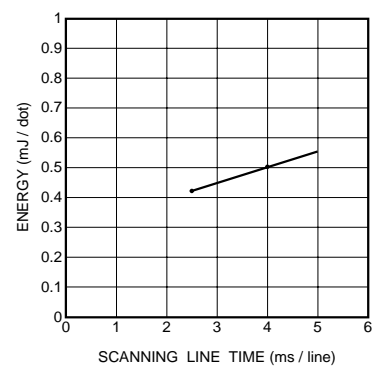


Fig. 5 Maximum energy curve

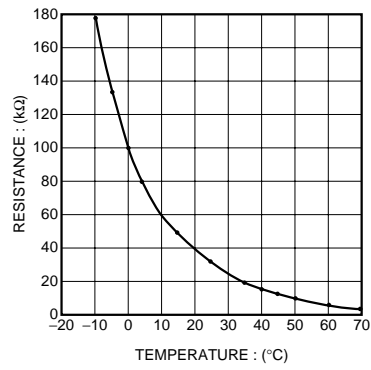


Fig. 6 Thermistor curve