

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

KF2003-GF10A

The KF2003-GF10A is a standard type 5V thermal printhead, developed mainly for handy printers. Maximum printing speed of 2 inch / second is possible.

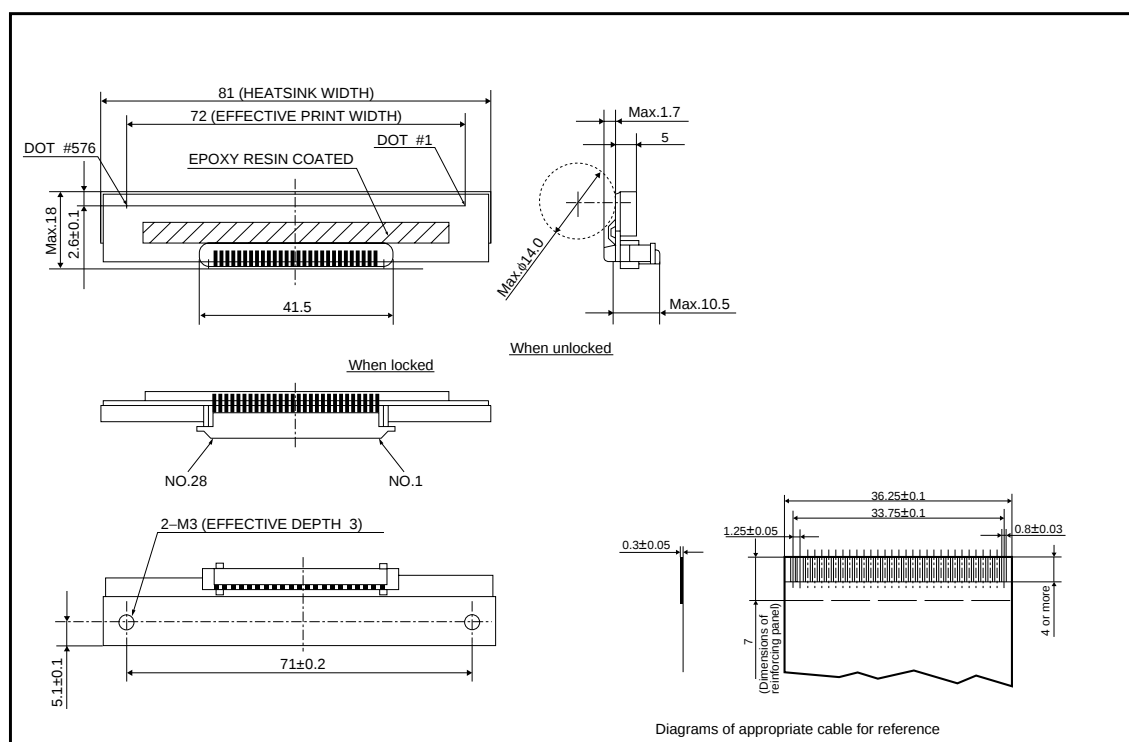
●Applications

Handy printers
Receipt printers

●Features

- 1) Five STB terminals and two AEO terminals provides nine partitions to enable low current printing.
- 2) Simple structure with our clip connector reduces the size and weight.

●External dimensions (Units : mm)



Printheads

●Equivalent circuit

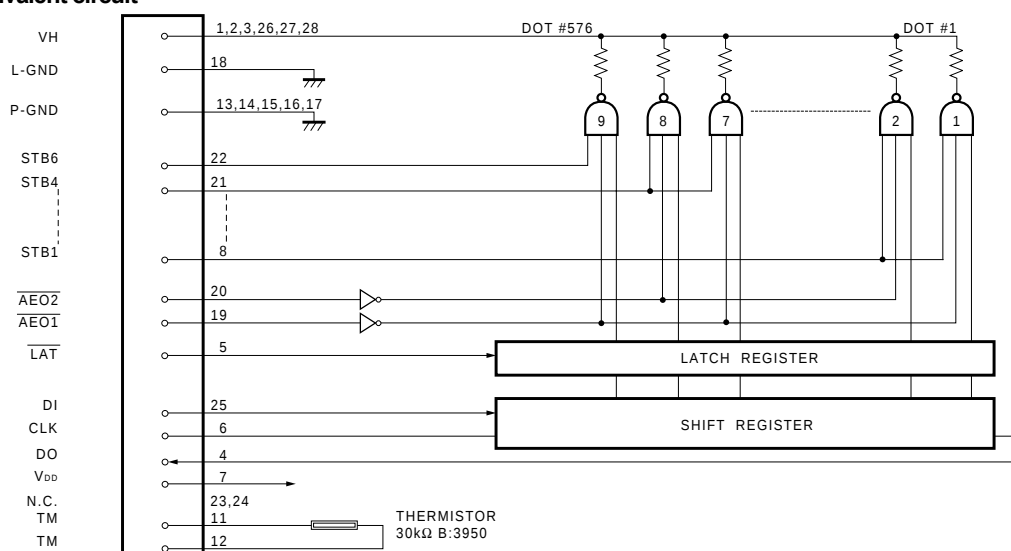


Fig. 1

●Pin assignments

No.	Circuit	No.	Circuit
1	VH	15	P-GND
2	VH	16	P-GND
3	VH	17	P-GND
4	DO	18	L-GND
5	LAT	19	AEO1
6	CLK	20	AEO2
7	VDD	21	STB4
8	STB1	22	STB5
9	STB2	23	N.C.
10	STB3	24	N.C.
11	TM	25	DI
12	TM	26	VH
13	P-GND	27	VH
14	P-GND	28	VH

L-GND: LOGIC GROUND
P-GND: POWER GROUND

Printheads

●Timing chart

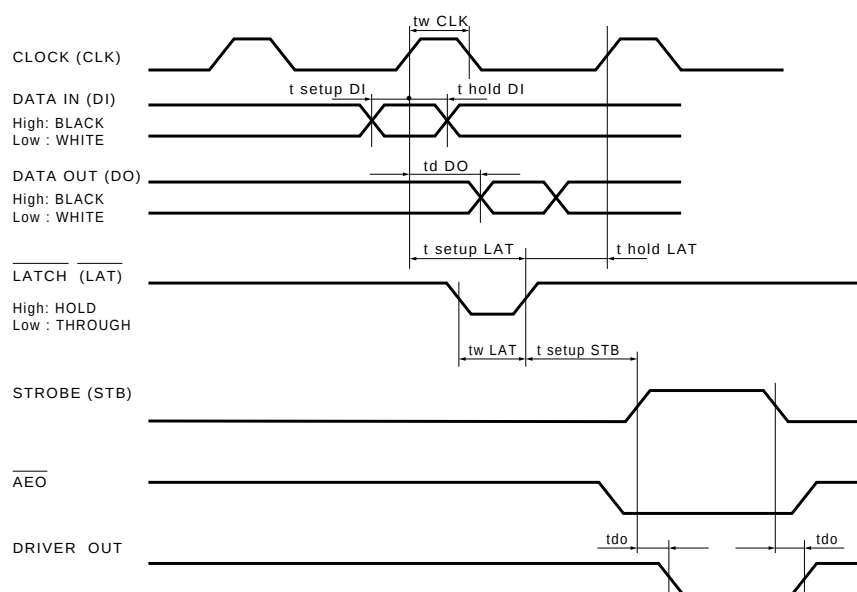


Fig. 2

●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	142	Ω
Applied voltage	V _H	4.2~8.5	V
Applied power	P _O	0.123	W / dot
Print cycle	SLT	5.0	ms
Pulse width	T _{ON}	2.58	ms
Maximum number of dots energized simultaneously	-	64	dots
Maximum clock frequency	-	8	MHz
Maximum roller diameter	-	ϕ 14.0	mm
Running life / pulse life	-	50 / 5 $\times$ 10 ⁷	km / pulses
Operating temperature	-	5~45	°C

Printheads

●Electrical characteristic curves

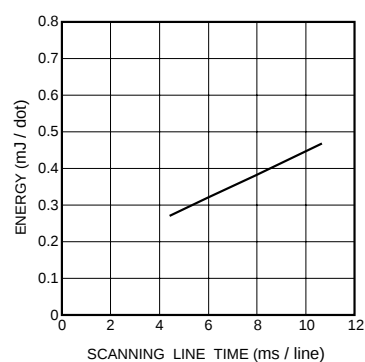


Fig. 3 Adaptive speed chart

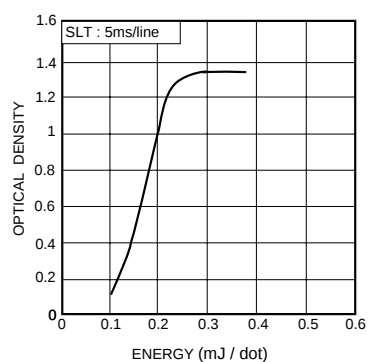


Fig. 4 Representative density curve

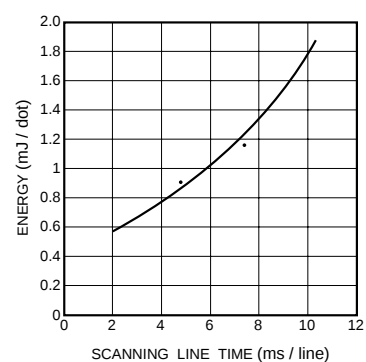


Fig. 5 Maximum energy curve

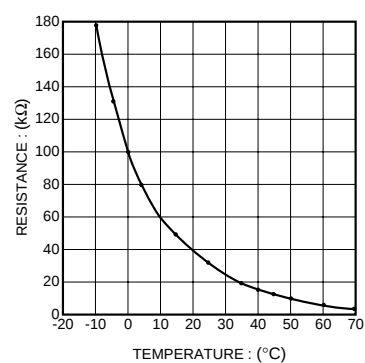


Fig. 6 Thermistor curve