

# Thick film thermal printhead

## KF3006-GL50A

The new high speed thick-film G-series (direct mount clip-pin interconnect) with the fast response anti-ESD thermal element and durable new protection film.

### ●Applications

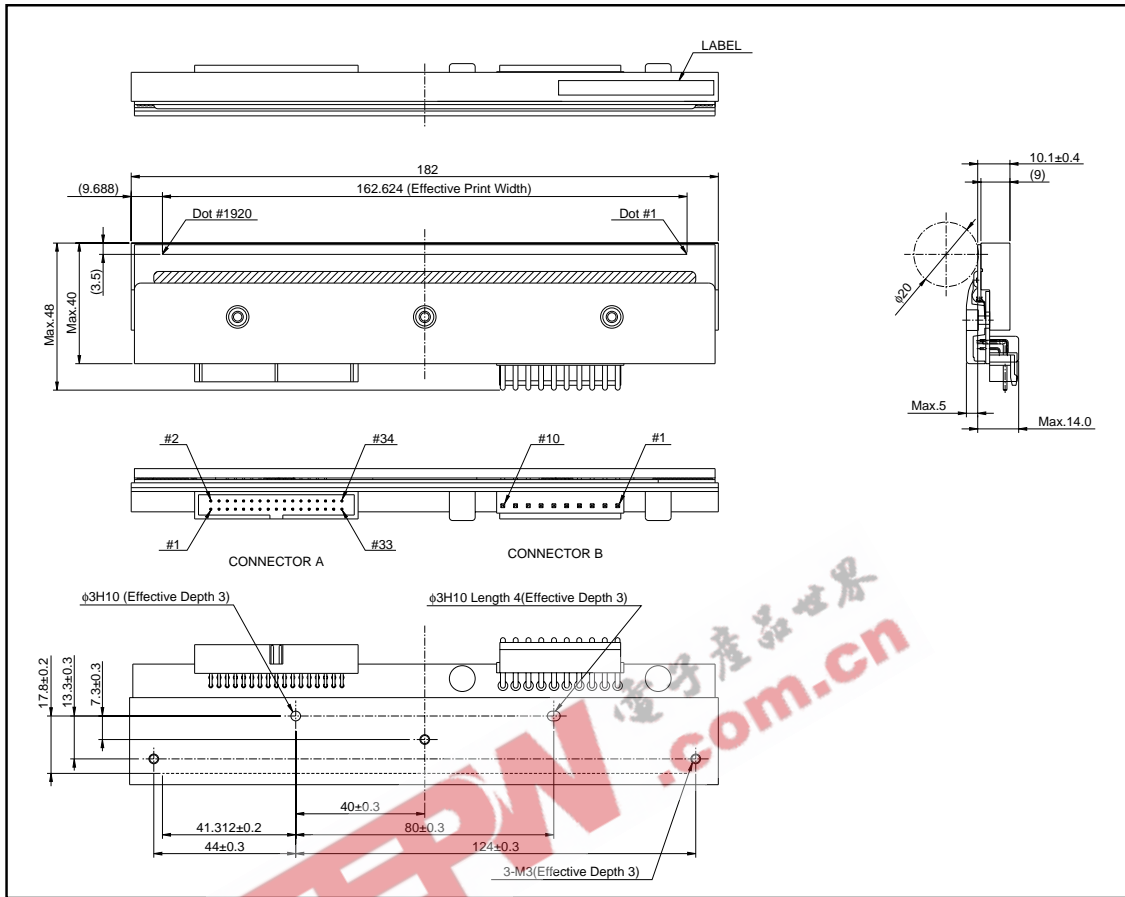
High speed label printer  
High speed bar code printer  
High speed ticket printer  
Various high speed terminal printers

### ●Features

- 1) Newly developed thick-film fast response thermal element is employed for this series and 6 inches/s or 150 mm/s is possible without thermal history control. It is possible to print 10 inches/s or 250 mm/s if external thermal history control is used.
- 2) 150km life realized by attributing durable new protection film.
- 3) New partial glaze construction makes it compatible with the thermal transfer application.
- 4) Market-proven G-series printhead construction ensures high reliability.

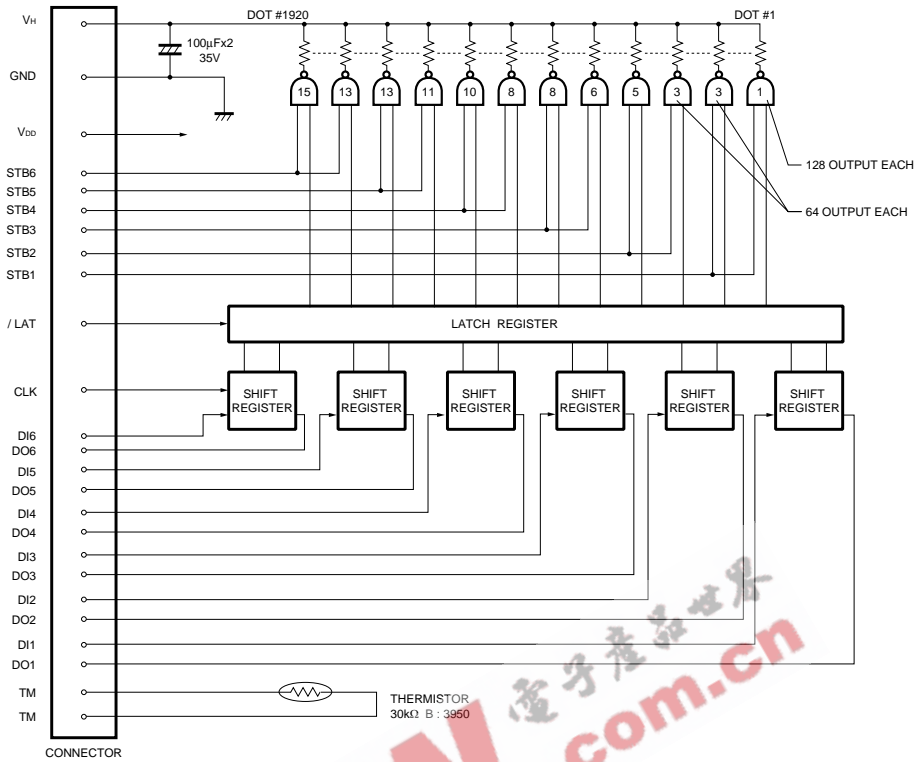
Printhead

●External dimensions (Units : mm)



Printhead

●Equivalent circuit



DI No.	DOT No.	STB No.	DOT No.
DI1	1~320	STB1	1~320
DI2	321~640	STB2	321~640
DI3	641~960	STB3	641~960
DI4	961~1280	STB4	961~1280
DI5	1281~1600	STB5	1281~1600
DI6	1601~1920	STB6	1601~1920

Fig.1

## Printhead

## ●Pin assignments

CONNECTOR A				CONNECTOR B	
No.	Circuit	No.	Circuit	No.	Circuit
1	GND	18	STB6	1	V <sub>H</sub>
2	V <sub>DD</sub>	19	CLK	2	V <sub>H</sub>
3	GND	20	/ LAT	3	V <sub>H</sub>
4	V <sub>DD</sub>	21	TM	4	V <sub>H</sub>
5	NC	22	TM	5	V <sub>H</sub>
6	NC	23	STB3	6	GND
7	NC	24	STB4	7	GND
8	NC	25	STB1	8	GND
9	NC	26	STB2	9	GND
10	NC	27	DI4	10	GND
11	DI6	28	DO4		
12	DO6	29	DI3		
13	DI5	30	DO3		
14	DO5	31	DI2		
15	NC	32	DO2		
16	NC	33	DI1		
17	STB5	34	DO1		

## ●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	162.624	mm
Dot pitch	—	0.0847	mm
Total dot number	—	1920	dots
Average resistance value	R <sub>ave</sub>	1250	Ω
Applied voltage	V <sub>H</sub>	24	V
Applied power	P <sub>o</sub>	0.49	W/dot
Print cycle	SLT	0.83	ms
Pulse width	T <sub>ON</sub>	0.32	ms
Maximum number of dots energized simultaneously	—	960	dots
Maximum clock frequency	—	8	MHz
Maximum roller diameter	—	φ20.0	mm
Running life / pulse life	—	150/(1×10 <sup>8</sup> )	km/pulses
Operating temperature	—	5~45	°C

Printhead

●Data sheets

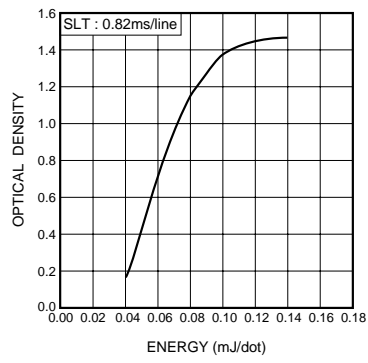


Fig.2 Representative density curve

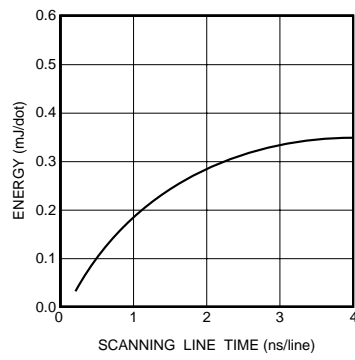


Fig.3 Maximum energy curve

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