

Thick Film Thermal Printhead (300dpi)

KF3004-GL50A

KF3004-GL50A is developing type of GL40 series which are developed mainly for label printers.

We have adopted low coefficient of abrasion and conductive protection coat to GL40 series which are possible for high speed and good printing quality.

That is KF3004-GL50A which is 24V standard thick film thermal print head with high speed, high quality of printing, high durability, long life, and strong resistance to abration.

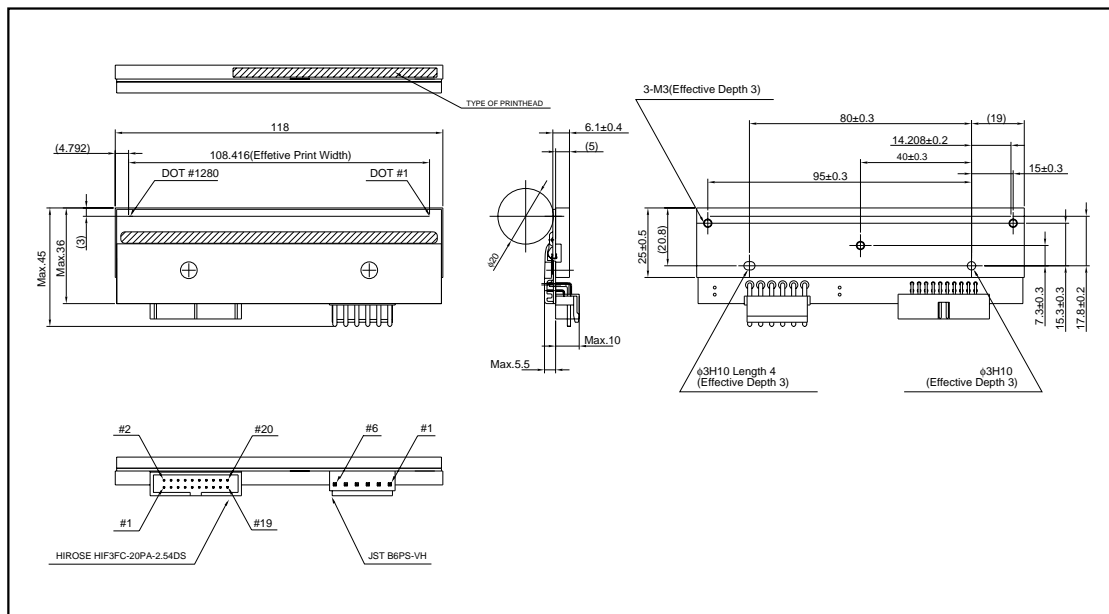
●Applications

- High speed label printer
- Food label printer
- High speed ticket printer
- High speed terminal printer

●Features

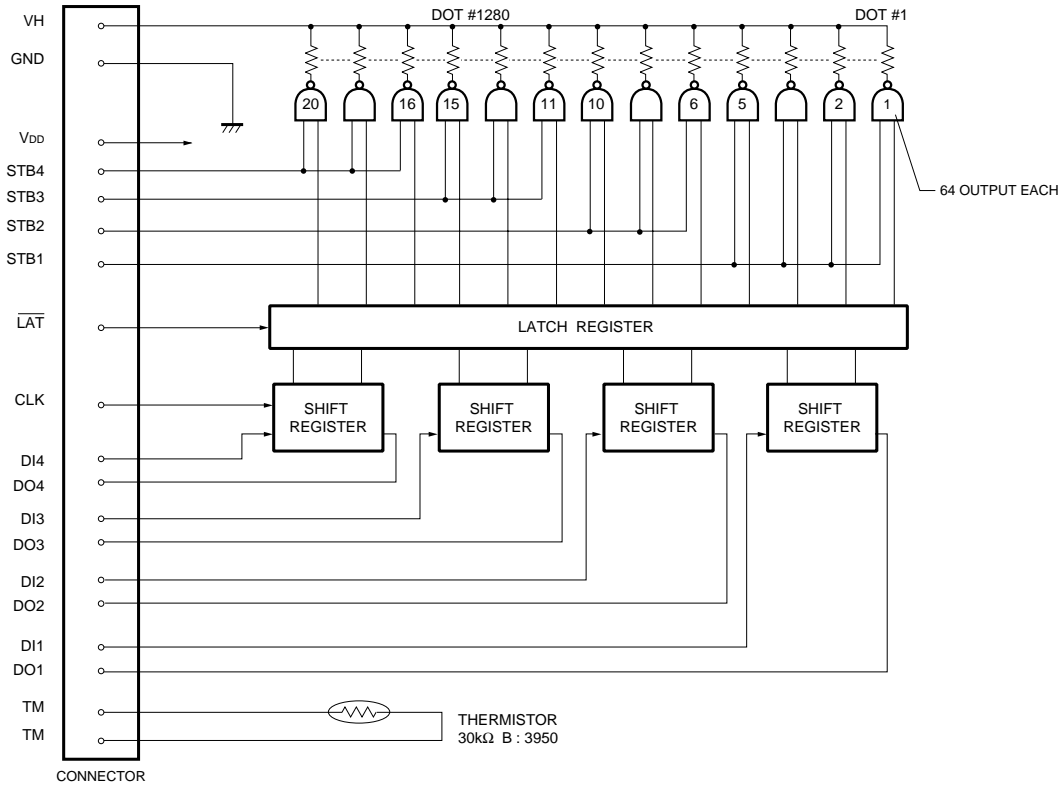
- 1) Perform 150km life time adopting new protective coat.
(Perform three times life time by coefficient of abrasion which is about 1/10 of current mass-producing coat.)
- 2) Build in thermal high speeded heater and perform high printing 6 IPS. (150mm / s)
- 3) Available for thermal transfer printing by adopting specific partial glaze.
- 4) Use the structure of thermal G-series which had good actual results. And these good results will guarantee high reliability of GL-series.
- 5) Line-up for 2 and 3 inches.

●External dimensions (Units : mm)



Printheads

●Equivalent circuit



| DI No. | DOT No. |
|--------|----------|
| DI1 | 1~384 |
| DI2 | 385~640 |
| DI3 | 641~896 |
| DI4 | 897~1280 |

| STB No. | DOT No. |
|---------|----------|
| STB1 | 1~384 |
| STB2 | 385~640 |
| STB3 | 641~896 |
| STB4 | 897~1280 |

Fig. 1

●Pin configuration

| CONNECTOR A | | | |
|-------------|-----------------|-----|---------|
| No. | Circuit | No. | Circuit |
| 1 | GND | 11 | TM |
| 2 | V _{DD} | 12 | TM |
| 3 | GND | 13 | DI3 |
| 4 | V _{DD} | 14 | DO3 |
| 5 | STB4 | 15 | DI2 |
| 6 | CLK | 16 | DO2 |
| 7 | DI4 | 17 | STB2 |
| 8 | DO4 | 18 | STB1 |
| 9 | STB3 | 19 | DI1 |
| 10 | LAT | 20 | DO1 |

| CONNECTOR B | |
|-------------|---------|
| No. | Circuit |
| 1 | VH |
| 2 | VH |
| 3 | VH |
| 4 | GND |
| 5 | GND |
| 6 | GND |

Printheads

●Timing chart

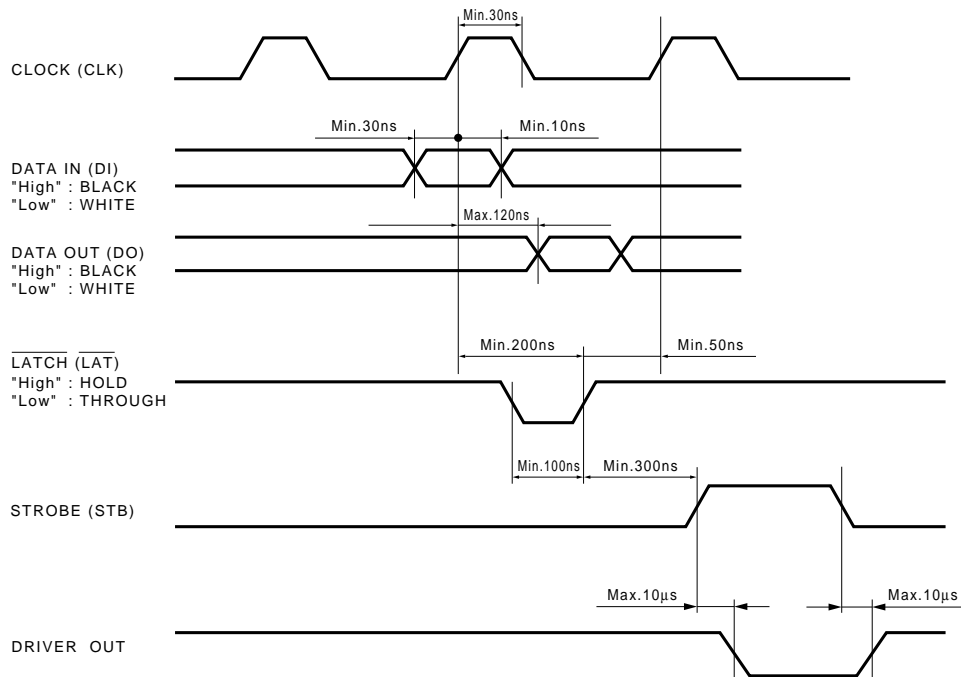


Fig.2

●Characteristics

| Parameter | Symbol | Typ. | Unit |
|-------------------------------------------------|-----------------|-------------------------|-------------|
| Effective printing width | - | 108.42 | mm |
| Dot pitch | - | 0.0847 | mm |
| Total dot number | - | 1280 | dots |
| Average resistance value | Rave | 1250 | Ω |
| Applied voltage | V _H | 24 | V |
| Applied power | P _O | 0.41 | W / dot |
| Print cycle | SLT | 0.83 | ms |
| Pulse width | T _{ON} | 0.292 | ms |
| Maximum number of dots energized simultaneously | - | 1280 | dots |
| Maximum clock frequency | - | 8 | MHz |
| Maximum roller diameter | - | φ20.0 | mm |
| Running life / pulse life | - | 150 / 1×10 ⁸ | km / pulses |
| Operating temperature | - | 5~45 | °C |

Printheads

●Data sheet

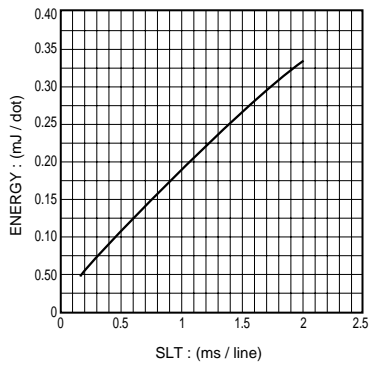


Fig.3 Maximum energy curve

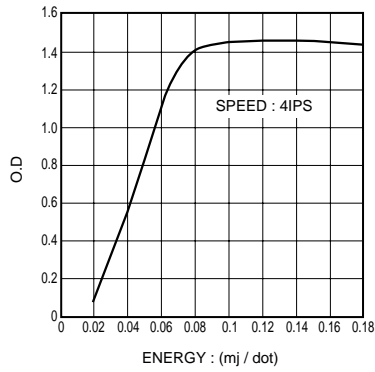


Fig.4 Representative density curve

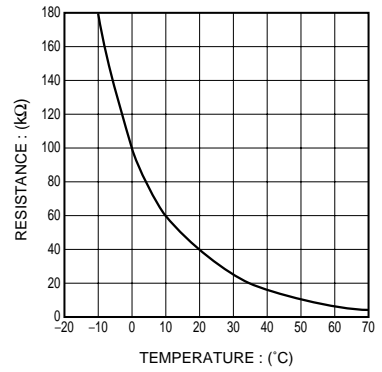


Fig.5 Thermistor curve