Thick film thermal printhead (with thermal historical control) KD3006-DC70A

DC70 series has our own internally developed heat-history control function. This product is best suited for applications which require 24 hours operation like factory production lines.

Applications

High speed label printer

High speed bar code printer

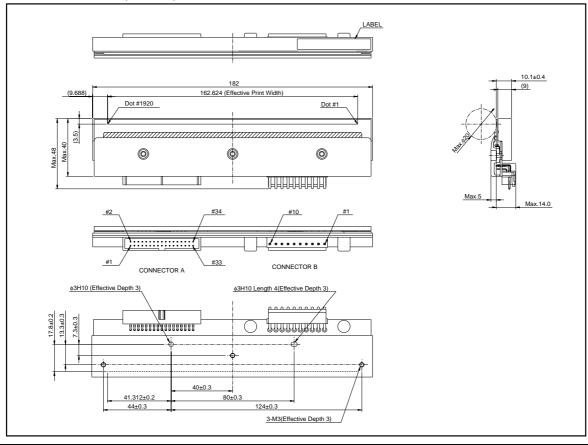
High speed ticket printer

Various high speed terminal printers

Features

- 1) Newly developed thick-film fast response thermal element and driver LSI with the function of thermal history control which is added the future history control are employed for this series. It is possible to print with super high speed of 10 inches / s or 250 mm / s.
- 2) 150km life realized by attributing durable new protection film.
- 3) New partial glaze construction makes it compatible with the thermal transfer application.

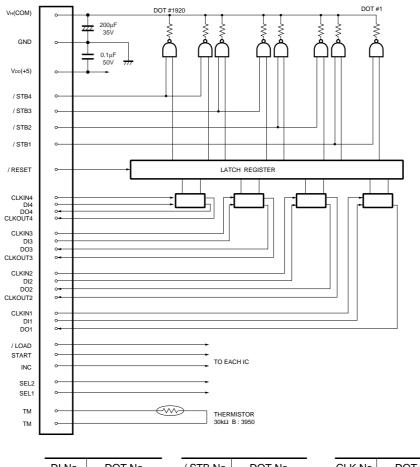
•External dimensions (Unit : mm)



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Printhead

Equivalent circuit



| Dl4 1920 to 1409 / STB4 1920 to 1409 CLKIN4 1920 to 1409 Dl3 1408 to 879 / STB3 1408 to 897 CLKIN3 1408 to 897 Dl2 896 to 513 / STB1 512 to 1 / STB1 512 to 1 CLKIN1 512 to 1 | DI No. | DOT No. | / STB N | No. DOT No. | CLK No. | DOT No. |
|---|--------|--------------|---------|----------------|---------|--------------|
| DI2 896 to 513 / STB2 896 to 513 CLKIN2 896 to 513 | DI4 | 1920 to 1409 | / STB | 4 1920 to 1409 | CLKIN4 | 1920 to 1409 |
| | DI3 | 1408 to 879 | / STB | 3 1408 to 897 | CLKIN3 | 1408 to 897 |
| DI1 512 to 1 / STB1 512 to 1 CLKIN1 512 to 1 | DI2 | 896 to 513 | / STB | 2 896 to 513 | CLKIN2 | 896 to 513 |
| | DI1 | 512 to 1 | / STB | 51 512 to 1 | CLKIN1 | 512 to 1 |

Fig.1

Printhead

Pin assignments

| СС | | | | |
|-----|-------------|-----|---------|--|
| No. | Circuit | No. | Circuit | |
| 1 | Vdd | 18 | / LOAD | |
| 2 | Vdd | 19 | / RESET | |
| 3 | NC | 20 | START | |
| 4 | NC | 21 | ТМ | |
| 5 | SEL2 | 22 | ТМ | |
| 6 | 6 SEL1 | | DI2 | |
| 7 | CLKIN4 (CP) | 24 | DO2 | |
| 8 | CLKOUT4 | 25 | DI1 | |
| 9 | CLKIN3 | 26 | DO1 | |
| 10 | CLKOUT3 | 27 | / STB2 | |
| 11 | DI4 | 28 | / STB1 | |
| 12 | 2 DO4 | | CLKIN2 | |
| 13 | DI3 | 30 | CLKOUT2 | |
| 14 | DO3 | 31 | CLKIN1 | |
| 15 | / STB4 | 32 | NC | |
| 16 | / STB3 | 33 | NC | |
| 17 | INC | 34 | NC | |

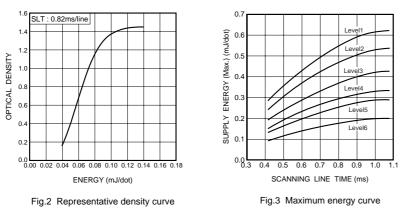
| CONNECTOR B | | | | | | |
|-------------|--------------------------------|--|--|--|--|--|
| No. | Circuit | | | | | |
| 1 | VH (COM) | | | | | |
| 2 | Vн (COM) | | | | | |
| 3 | Vн (COM) Vн (COM) Vн (COM) | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | GND | | | | | |
| 7 | GND | | | | | |
| 8 | GND | | | | | |
| 9 | GND | | | | | |
| 10 | GND | | | | | |

Characteristics

| Parameter | | Typical | Unit |
|---|------|--------------------------|-----------|
| Effective printing width | | 162.624 | mm |
| Dot pitch | | 0.0847 | mm |
| Total dot number | - | 1920 | dots |
| Average resistance value | Rave | 1000 | Ω |
| Applied voltage | Vн | 24 | V |
| Applied power | Po | 0.50 | W/dot |
| Print cycle | SLT | 0.41 | ms |
| Maximum number of dots energized simultaneously | - | 1920 | 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 to 45 | °C |

Printhead

Data sheets



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