

High speed thermal printhead (with thermal historical control)

SE3002-DC70A

High speed, high quality, and high durability are achieved by using step free structure with high performance partial glaze and highly conductive overcoat layer. SE300*-DC70A series are lined up which can accommodate with all types of barcode labeling printers from Direct to Thermal Transfer, normal to high speed (over 300mm/s).

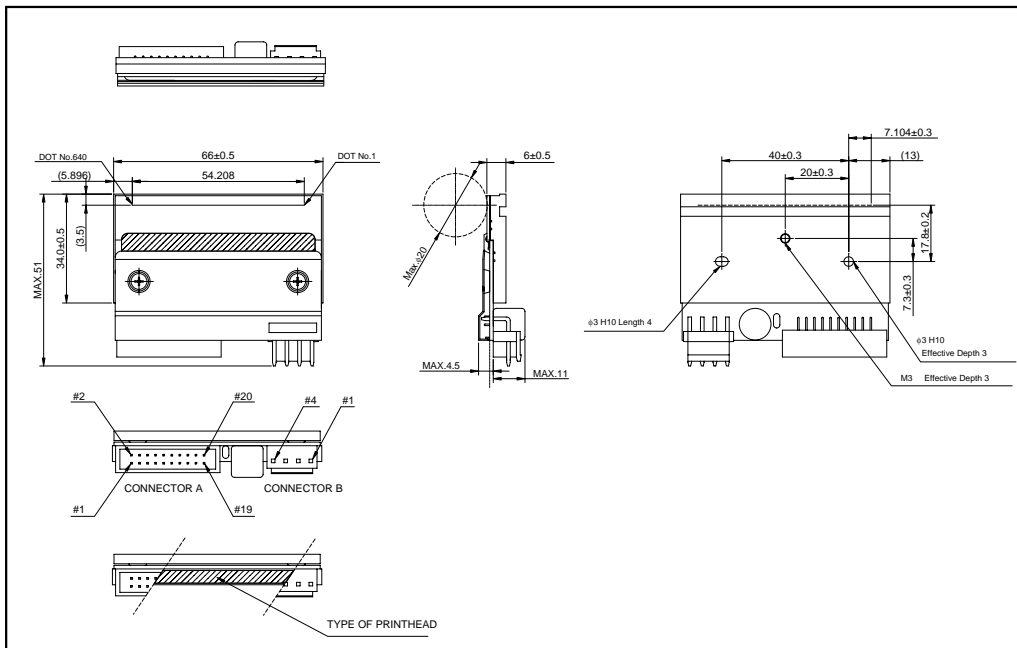
●Applications

- Bar code printer
- Label printer
- Packaging printer
- ATM
- Ticket printer

●Features

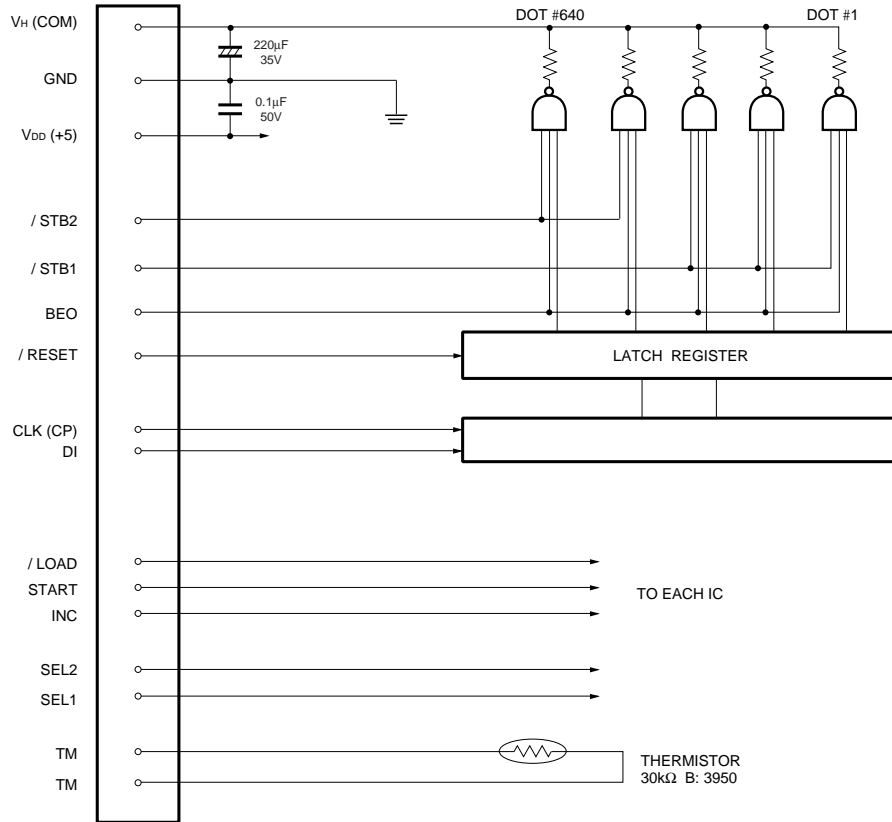
- 1) ROHM new technology “STEP FREE” structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
- 2) High-hardness protect cote type “W-coat” is employed with 150km abrasion life-time.
- 3) A built in history-control functionality, high-speed printing up to 300mm / s can be achieved at 300dpi with clear print image.

●External dimensions (Unit : mm)



Printheads

●Equivalent circuit



| DI No. | DOT No. |
|--------|----------|
| DI | 640 to 1 |

| / STB No. | DOT No. |
|-----------|------------|
| / STB2 | 640 to 385 |
| / STB1 | 384 to 1 |

●Pin assignments

CONNECTOR A

| No. | Circuit | No. | Circuit |
|-----|-----------------|-----|---------|
| 1 | V _{DD} | 2 | BEO |
| 3 | GND | 4 | DI |
| 5 | GND | 6 | CLK(CP) |
| 7 | /LOAD | 8 | START |
| 9 | INC | 10 | N.C. |
| 11 | SEL2 | 12 | SEL1 |
| 13 | /RESET | 14 | / STB 2 |
| 15 | / STB 1 | 16 | TM |
| 17 | TM | 18 | SENS1 |
| 19 | SENS2 | 20 | SENS3 |

CONNECTOR B

| No. | Circuit | No. | Circuit |
|-----|----------------------|-----|----------------------|
| 1 | V _H (COM) | 2 | V _H (COM) |
| 3 | GND | 4 | GND |

Printheads

●Characteristics

| Parameter | Symbol | Typical | Unit |
|---|----------------|--------------------------|-----------|
| Effective printing width | – | 54.2 | mm |
| Dot pitch | – | 0.0847 | mm |
| Total dot number | – | 640 | dots |
| Average resistance value | Rave | 850 | Ω |
| Applied voltage | V _H | 24 | V |
| Applied power | P _o | 0.59 | W/dot |
| Print cycle | SLT | 0.28 | ms |
| Maximum number of dots energized simultaneously | – | 640 | dots |
| Maximum clock frequency | – | 8 | MHz |
| Maximum roller diameter | – | φ20 | mm |
| Running life / pulse life | – | 150/(1×10 ⁸) | km/pulses |
| Operating temperature | – | 5 to 45 | °C |

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