

## Printheads

# Near edge thermal printhead (with thermal historical control)

## SH2004-DC70A

SH-DC70 series was developed with two key structures step-free and near edge for the packaging printer market which requires high speed continuous printing. It is suitable for printers in factory line where high speed 24 hours continuous printing is required.

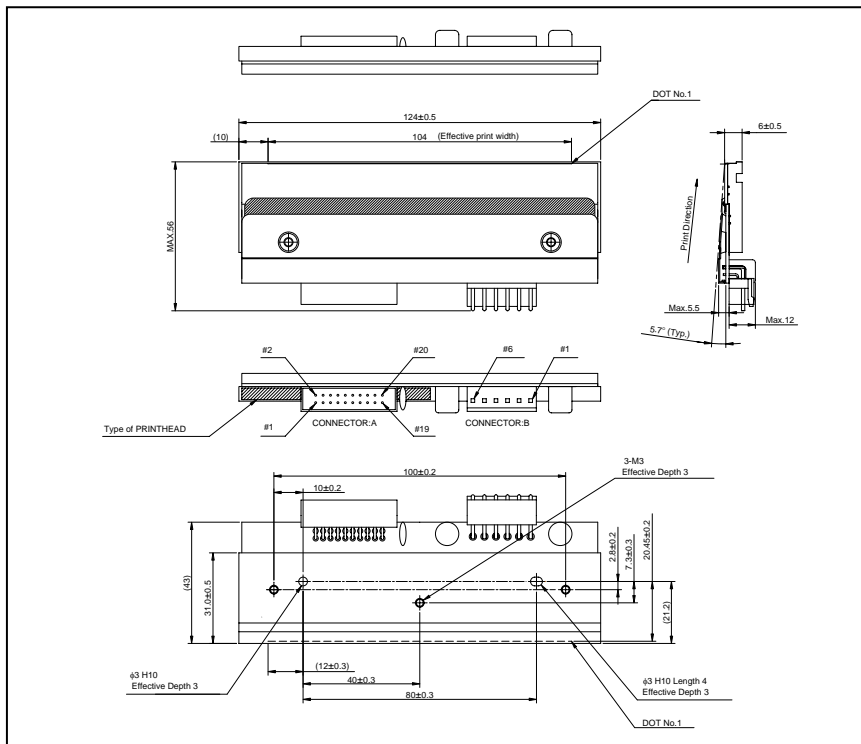
### ●Applications

Bar code printer  
Label printer  
Packaging printer  
ATM  
Ticket printer

### ●Features

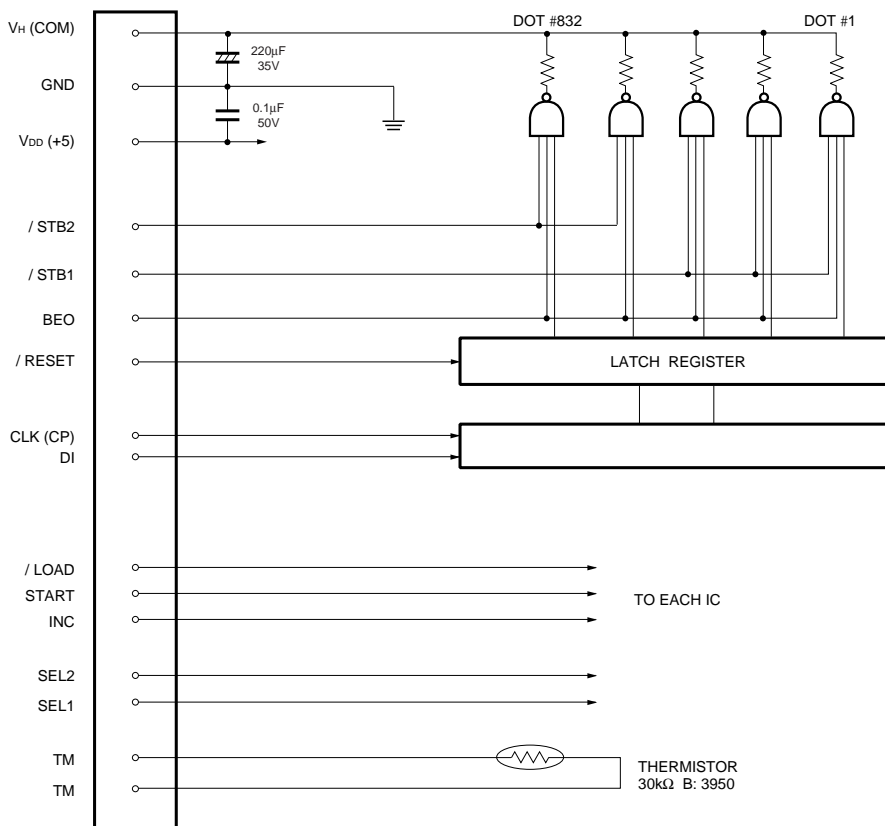
- 1) ROHM new technology "STEP FREE" structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
- 2) Head inclination by near-edge structure, applicable to the large-size platen. Resin type thermal-transfer ink-ribbon can be used.
- 3) High-hardness protect cote type "W-coat" is employed with 150km abrasion life-time.
- 4) A built in history-control functionality, high-speed printing up to 300mm / s can be achieved with clear print image.

### ●External dimensions (Unit : mm)



Printheads

●Equivalent circuit



DI No.	DOT No.
DI2	832 to 449
DI1	448 to 1

/ STB No.	DOT No.
/ STB2	832 to 449
/ STB1	448 to 1

●Pin assignments

CONNECTOR A

No.	Circuit	No.	Circuit
1	V <sub>DD</sub>	2	BEO
3	GND	4	DI2
5	GND	6	CLK(CP)
7	/LOAD	8	START
9	INC	10	DI1
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 <sub>H</sub> (COM)	2	V <sub>H</sub> (COM)
3	V <sub>H</sub> (COM)	4	GND
5	GND	6	GND

**Printheads**

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**●Characteristics**

Parameter	Symbol	Typical	Unit
Effective printing width	–	104.0	mm
Dot pitch	–	0.125	mm
Total dot number	–	832	dots
Average resistance value	Rave	550	Ω
Applied voltage	V <sub>H</sub>	24	V
Applied power	P <sub>o</sub>	0.86	W/dot
Print cycle	SLT	0.49	ms
Maximum number of dots energized simultaneously	–	832	dots
Maximum clock frequency	–	8	MHz
Maximum roller diameter	–	φ50	mm
Running life / pulse life	–	150/(1×10 <sup>8</sup> )	km/pulses
Operating temperature	–	5 to 45	°C

## Appendix

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