Hight Speed Thermal Printhead (8dots / mm)

SE2004-DC94A

High speed, high quality, and high durability are achieved by using step free structure with high performance partial glaze and highly conductive overcoat layer. SE200*-DC94A 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).

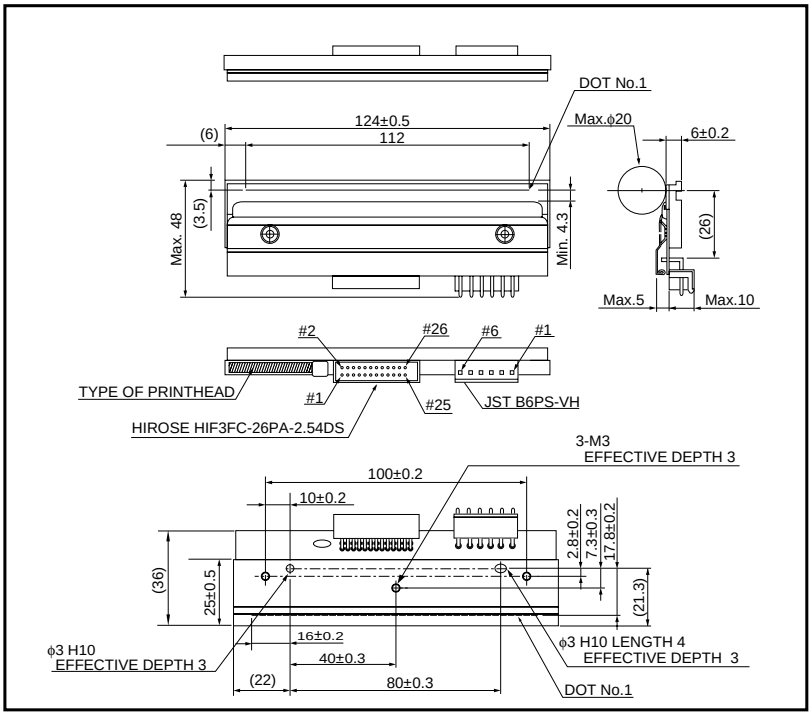
●Applications

Bar code label printers
Ticket printers
General purpose compact printers

●Features

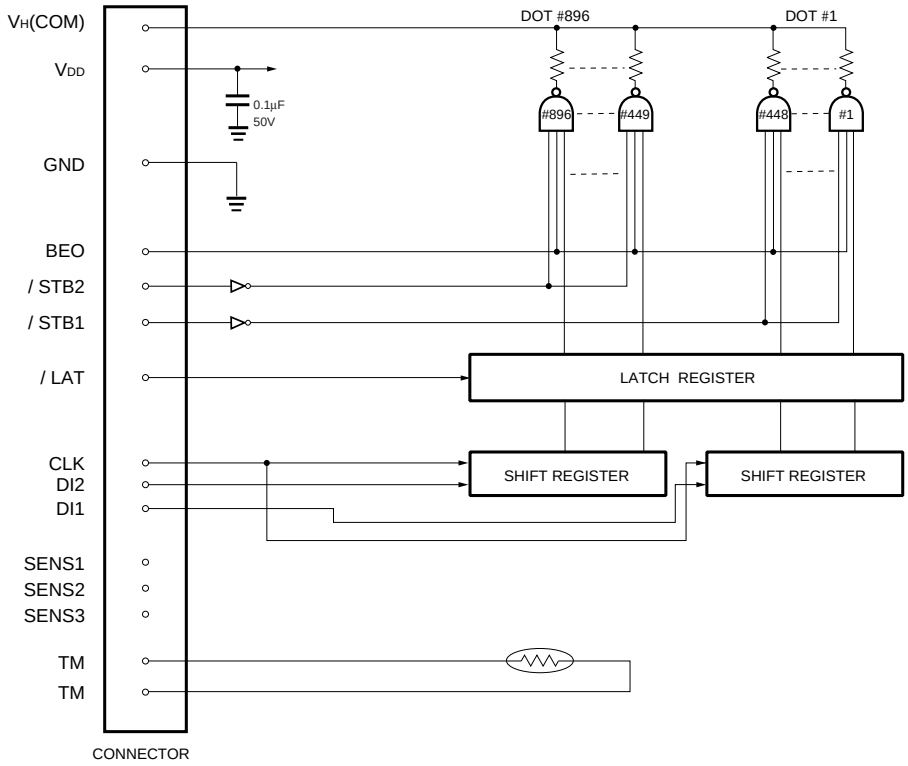
1) Anti Sticking Treatment reduces sticking problems and achieves high print quality at any environmental conditions.
2) ROHM new technology “STEP FREE” structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
3) Standard glazed components to accommodate thick paper.
4) Using a hard conductive film as a protective film on the heating element offers excellent resistance to electrostatic damage.
5) Compatible with the SE3004-DC94A (300dpi) in mechanical specifications, to facilitate the making of a series of printers.

●Dimensions (Unit : mm)



Note: No heat history control function inside the thermal printhead. External heat history control is required for high speed printing.

●**Equivalent circuit**



DI No.	DOT No.
DI2	896 to 449
DI1	448 to 1

STB No.	DOT No.
/ STB2	896 to 449
/ STB1	448 to 1

●**Pin configuration**

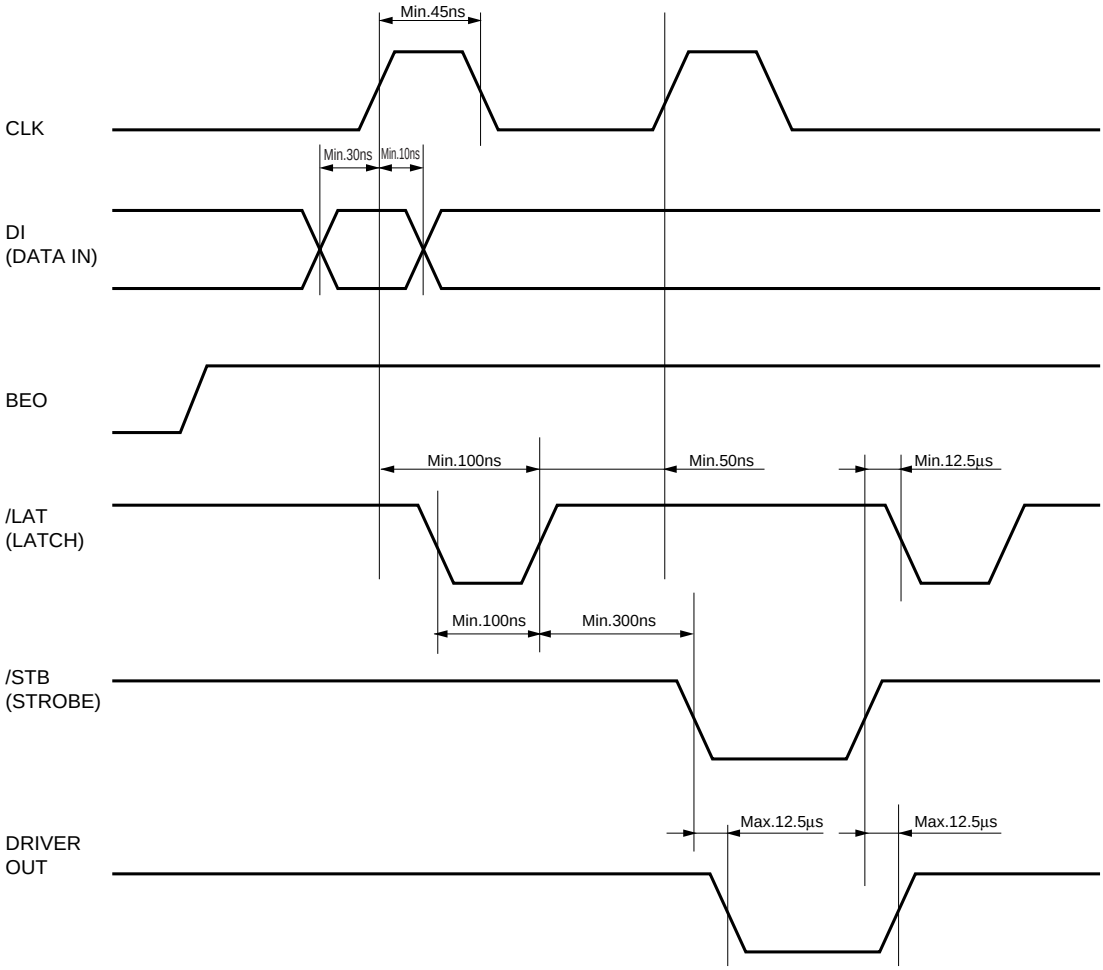
HIROSE

No.	Circuit	No.	Circuit
1	GND	2	VDD
3	DI2	4	CLK(CP)
5	/LAT	6	/STB2
7	NC	8	DI1
9	/STB1	10	NC
11	TM	12	TM
13	SENS3	14	SENS2
15	SENS1	16	BEO
17	NC	18	NC
19	NC	20	NC
21	NC	22	NC
23	NC	24	NC
25	NC	26	NC

JST

No.	Circuit
1	COM
2	COM
3	COM
4	GND
5	GND
6	GND

●**Timing chart**



●**Characteristics**

Parameter	Symbol	Typical	Unit
Effective printing width	–	112	mm
Dot pitch	–	0.125	mm
Total dot number	–	896	dots
Average resistance value	Rave	550	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.91	W/dot
Print cycle	SLT	0.42	ms
Maximum number of dots energized simultaneously	–	896	dots
Maximum clock frequency	–	10	MHz
Maximum roller diameter	–	20	mm
Running life / pulse life	–	50 / 1×10^8	km / pulses
Operating temperature	–	5 to 45	°C

●**Data sheet**

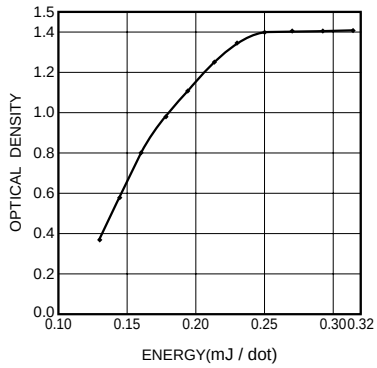


Fig. 1 Representative density curve

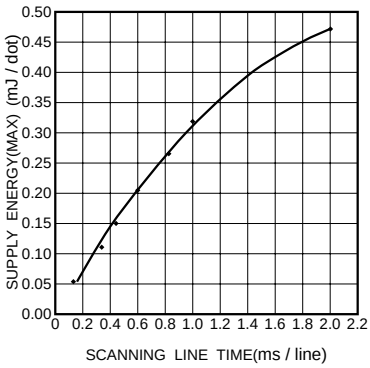


Fig. 2 Maximum energy curve

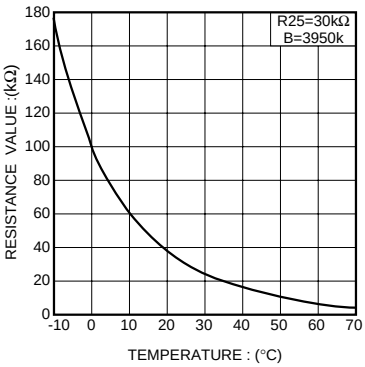


Fig. 3 Thermistor curve

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