

High speed thermal printhead (300 dots / inch)

SE3003-DC90A

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*-DC90A 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).

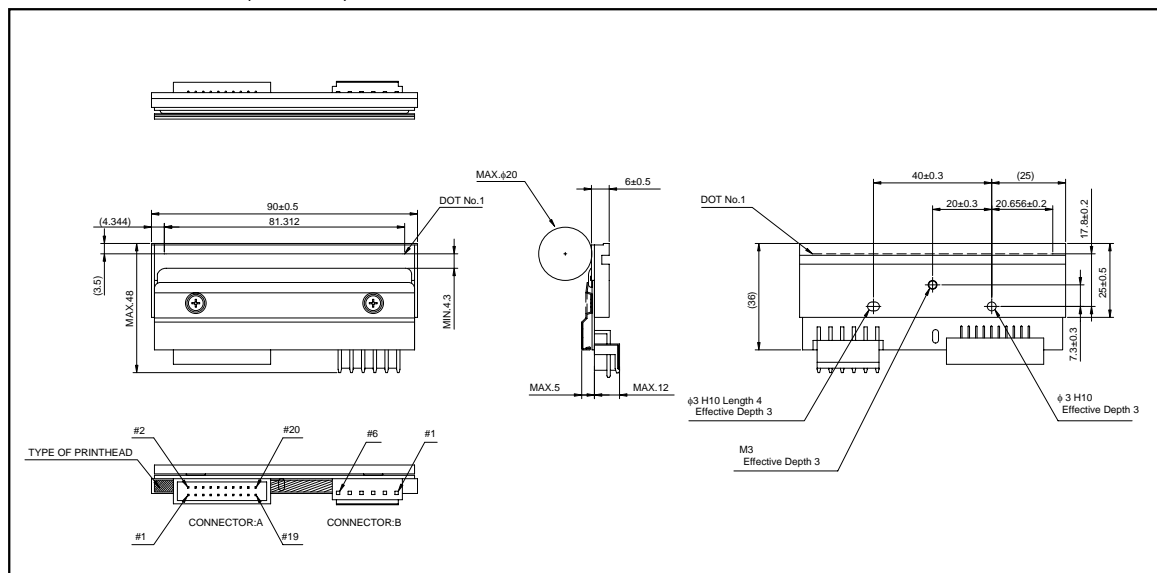
●Applications

Barcode printers
Label printers
Packaging printers
ATM
Ticket printers
Scale printers

●Features

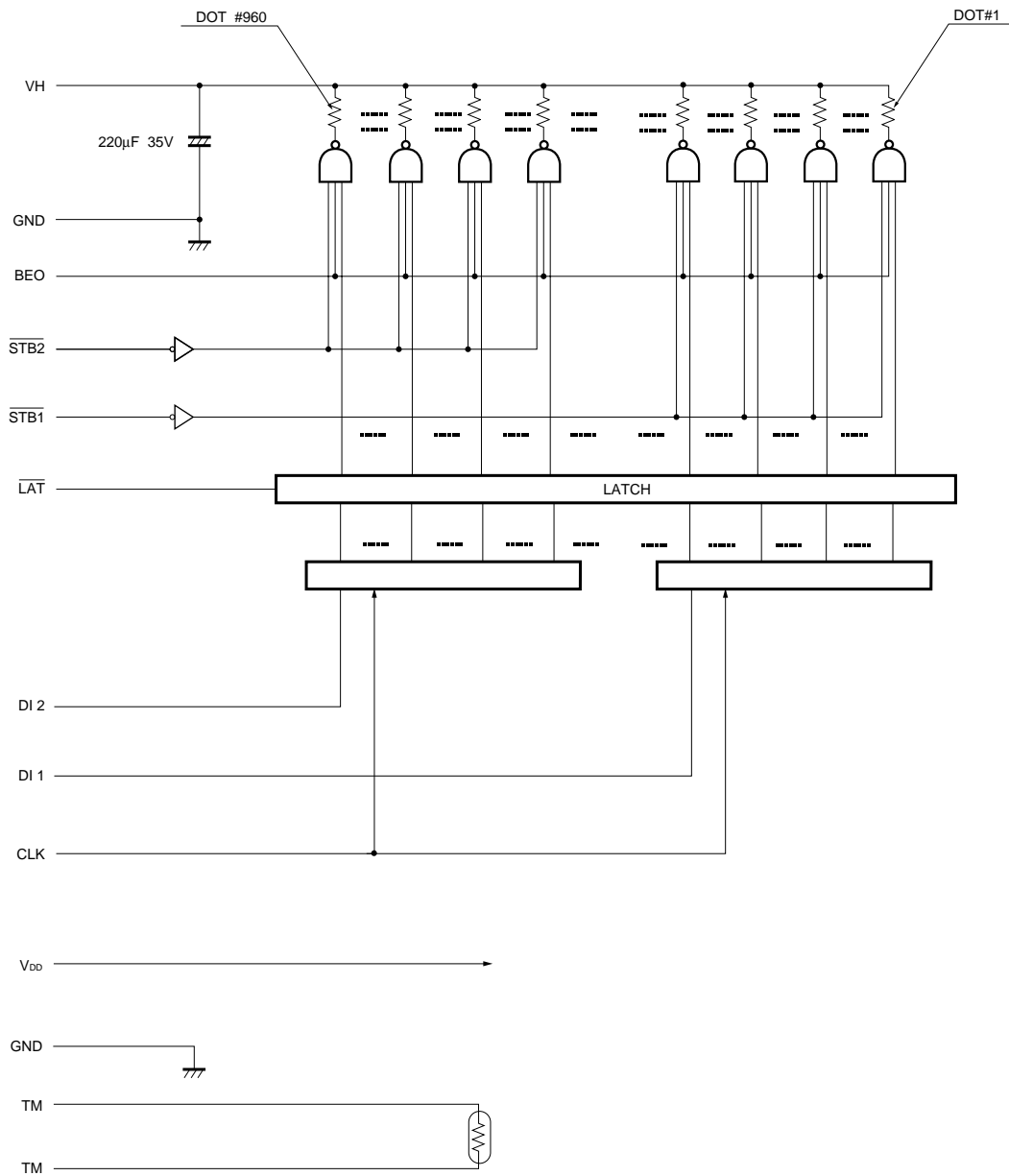
- 1) ROHM new technology "STEP FREE" structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
- 2) Standard glazed components to accommodate thick paper.
- 3) High speed clock to facilitate external heat history control.
- 4) Using a hard conductive film as a protective film on the heating element offers excellent resistance to electrostatic damage.

●External 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.
DI 2	960 to 449
DI 1	448 to 1

STB No.	DOT No.
STB2	960 to 449
STB1	448 to 1

Tentative
Printhead

SE3003-DC90A
Under development

●Pin assignments

HIROSE

No.	Circuit	No.	Circuit
1	V _{DD}	2	BEO
3	GND	4	DI2
5	N.C.	6	CLK
7	LAT	8	GND
9	GND	10	DI1
11	N.C.	12	GND
13	V _{DD}	14	STB2
15	STB1	16	TM
17	TM	18	SENS1
19	SENS2	20	SENS3

JST

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

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	81.3	mm
Dot pitch	—	0.0847	mm
Total dot number	—	960	dots
Average resistance value	R _{ave}	850	Ω
Applied voltage	V _H	24	V
Applied power	P _O	0.61	W / dot
Print cycle	SLT	0.42	ms
Maximum number of dots energized simultaneously	—	960	dots
Maximum clock frequency	—	10	MHz
Maximum roller diameter	—	φ20	mm
Running life / pulse life	—	150 / 10 ⁸	km / pulses
Operating temperature	—	5 to 45	°C

Appendix

Notes

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