Near edge thermal printhead
(with thermal historical control)

SH3002-DC80A

SH3002-DC80A achieves high quality print and high reliability, by Rohm unique Step Free Technology.
SH3002-DC80A is near edge type thermal head, whose heater line is formed at the angle of the glaze.
Therefore, it is applicable to large diameter of platen and heat-peeling ribbon. Especially it is suitable to the packaging market that requires ultra high speed printing over 1,300mm / s.

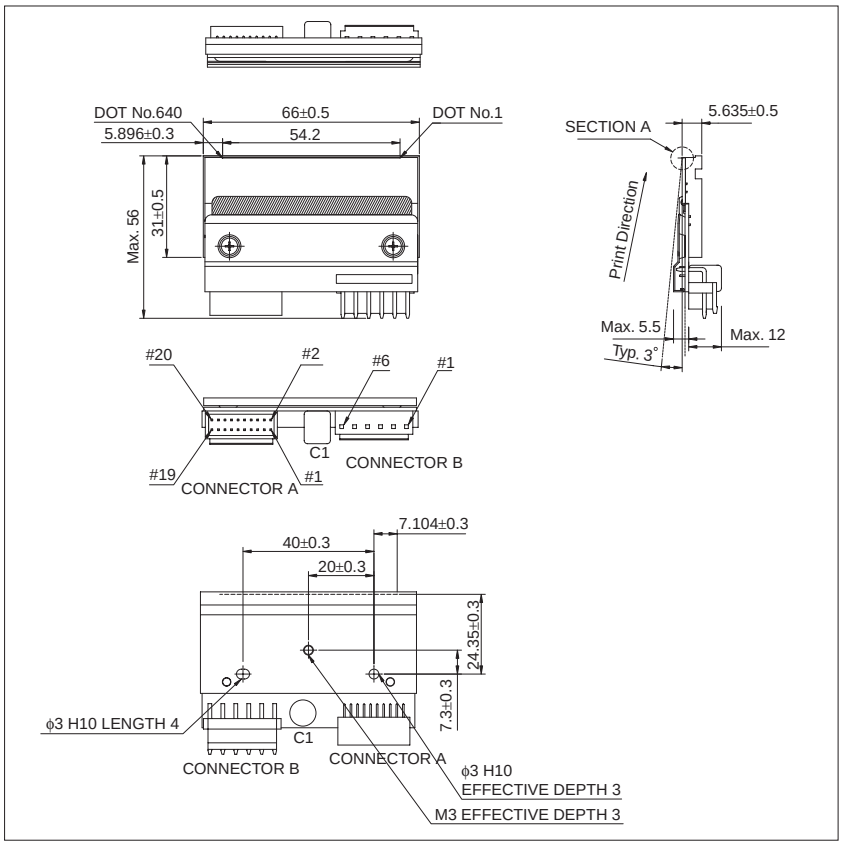
●Applications

Barcode label printers
Packaging printers
Ticket printers
General purpose portable printers

●Features

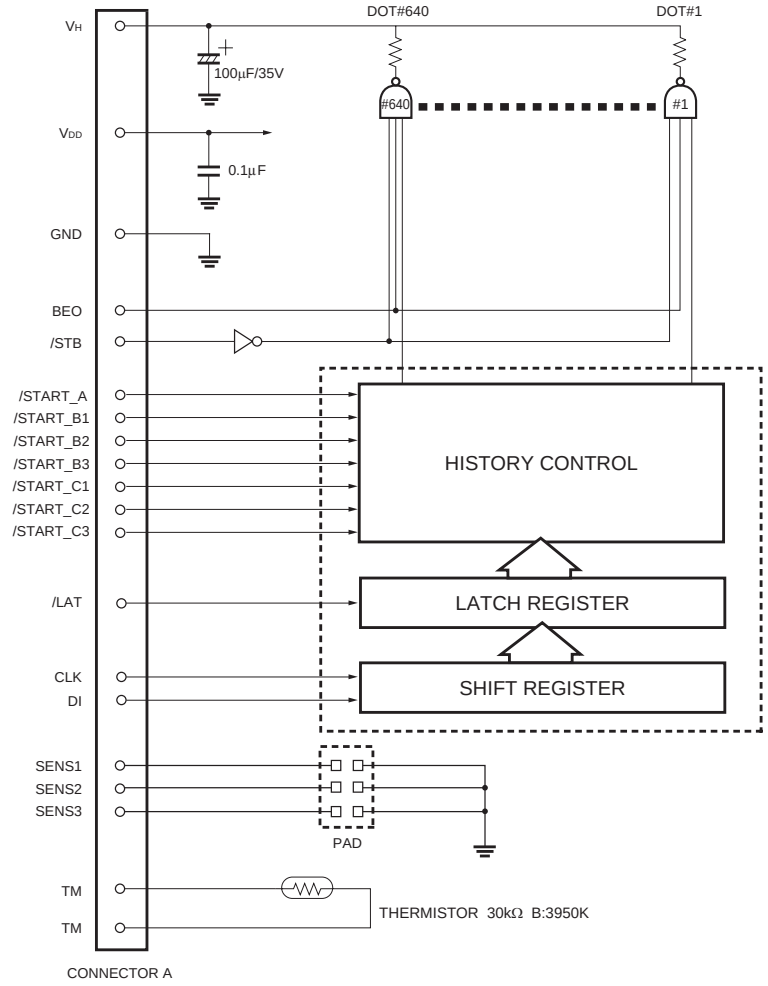
1) ROHM unique “STEP FREE” structure contributes to better anti-corrosion characteristics, less scratch break down, and better heat efficiency.
2) Against the printing surface, the print head should be used at a slant during a print due to its structure, therefore, it is applicable to heat-peeling ribbon in high speed.
3) It has good anti-ESD characteristic by applying hard, conductive layer as the heat element protective coating.
4) Mounting space can be minimized, which contributes to the downsizing of the printer.
5) It has built-in history control and pre-heat function. It is possible to print at over 1,300mm / s.

●Dimensions (Unit : mm)



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●Equivalent circuit



●Pin configuration

CONNECTOR A

No.	Circuit	No.	Circuit
1	GND	2	N.C.
3	V_{DD}	4	TM
5	TM	6	SENS3
7	/START_C3	8	/START_C2
9	/START_C1	10	/START_A
11	SENS2	12	SENS1
13	/START_B3	14	/START_B2
15	/START_B1	16	BEO
17	/STB	18	/LAT
19	CLK	20	DI

CONNECTOR B

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

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	108.416	mm
Dot pitch	–	0.0847	mm
Total dot number	–	1280	dots
Average resistance value	Rave	550	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.81	W / dot
Print cycle	SLT	0.141	ms
Maximum number of dots energized simultaneously	–	1280	dots
Maximum clock frequency	–	10	MHz
Maximum roller diameter	–	–	mm
Running life / pulse life	–	150 / 10^8	km / pulses
Operating temperature	–	5 to 45	°C

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Notes

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