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.
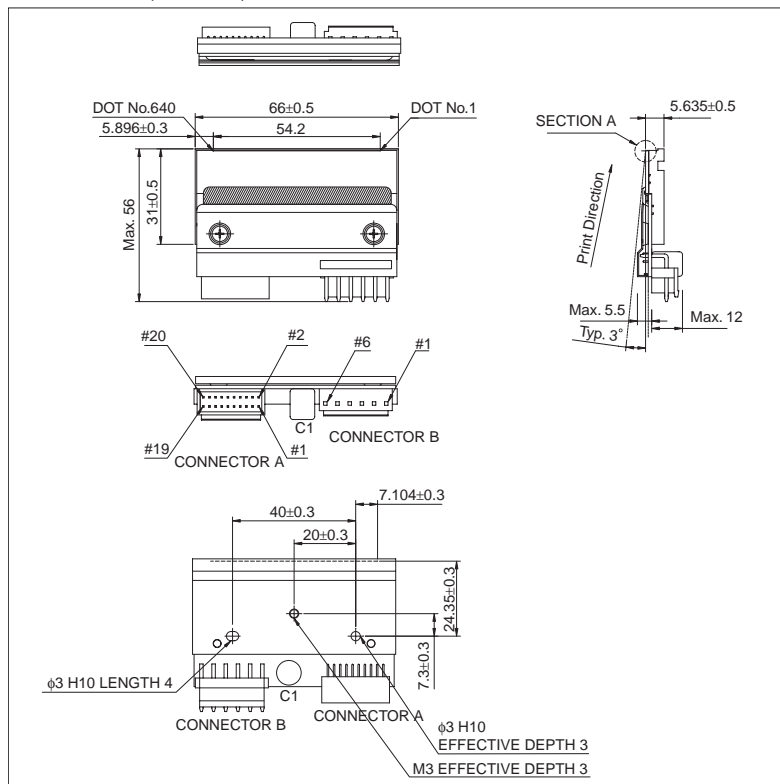
●**Applications**

Barcode label printers

Packaging printers
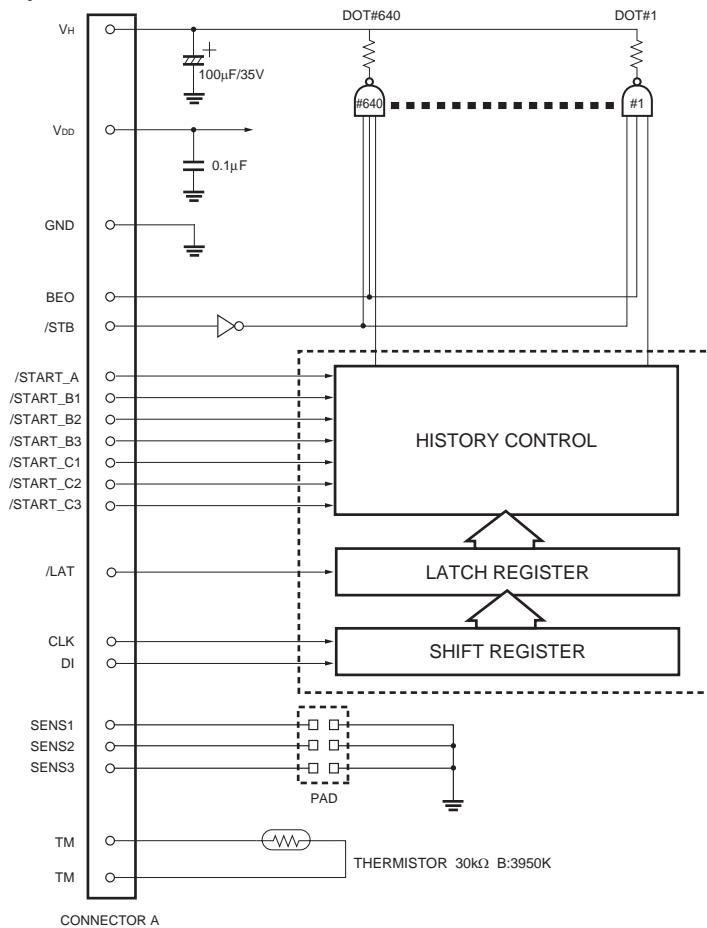
Ticket printers

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)

●**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

Notes

No copying or reproduction of this document, in part or in whole, is permitted without the consent of ROHM CO.,LTD.

The content specified herein is subject to change for improvement without notice.

The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request.

Examples of application circuits, circuit constants and any other information contained herein illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.

Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage.

The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information.

The Products specified in this document are intended to be used with general-use electronic equipment or devices (such as audio visual equipment, office-automation equipment, communication devices, electronic appliances and amusement devices).

The Products are not designed to be radiation tolerant.

While ROHM always makes efforts to enhance the quality and reliability of its Products, a Product may fail or malfunction for a variety of reasons.

Please be sure to implement in your equipment using the Products safety measures to guard against the possibility of physical injury, fire or any other damage caused in the event of the failure of any Product, such as derating, redundancy, fire control and fail-safe designs. ROHM shall bear no responsibility whatsoever for your use of any Product outside of the prescribed scope or not in accordance with the instruction manual.

The Products are not designed or manufactured to be used with any equipment, device or system which requires an extremely high level of reliability the failure or malfunction of which may result in a direct threat to human life or create a risk of human injury (such as a medical instrument, transportation equipment, aerospace machinery, nuclear-reactor controller, fuel-controller or other safety device). ROHM shall bear no responsibility in any way for use of any of the Products for the above special purposes. If a Product is intended to be used for any such special purpose, please contact a ROHM sales representative before purchasing.

If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law.

Thank you for your accessing to ROHM product informations.
More detail product informations and catalogs are available, please contact your nearest sales office.

ROHM Customer Support System

THE AMERICAS / **EUROPE** / **ASIA** / **JAPAN**

www.rohm.com

Contact us : webmaster @ rohm.co.jp

ROHM Co., Ltd. 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan

TEL : +81-75-311-2121
FAX : +81-75-315-0172

ROHM
SEMICONDUCTOR