

Near edge type thermal printhead(11.81dots / mm)

SH3004-DC90A

SH-DC90 series achieves high quality print and high reliability, by Rohm unique Step Free Technology.

SH-DC90 series is near edge type thermal head, whose heater line is formed at the angle of the glaze. Therefore, peeling-off ribbon at the hot state and large size platen can be used with this thermal head and is best suitable for the packaging printer market which requires the continuous print at high speed.

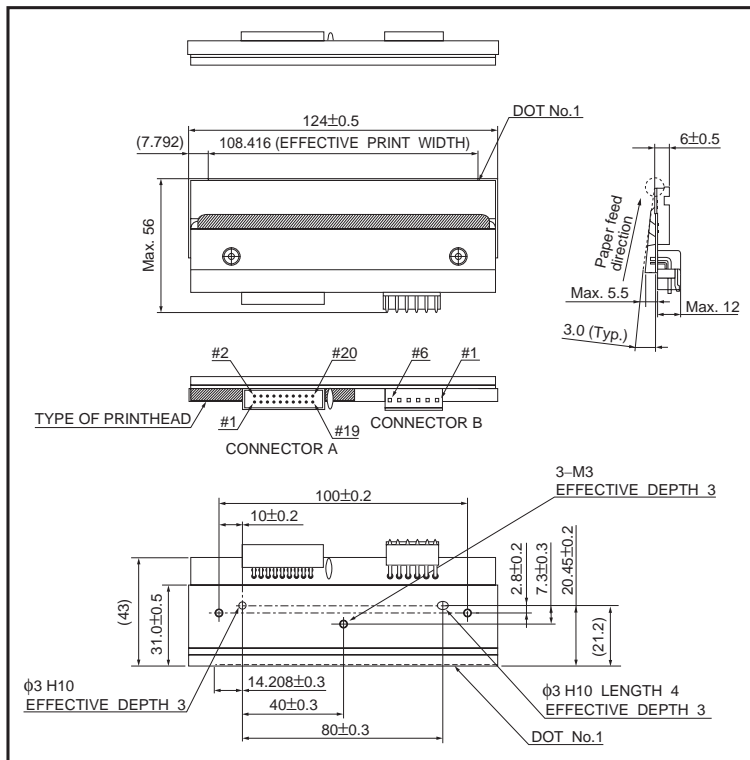
●Applications

- Barcode label printers
- Packaging printers
- Ticket printers
- General purpose portable printers

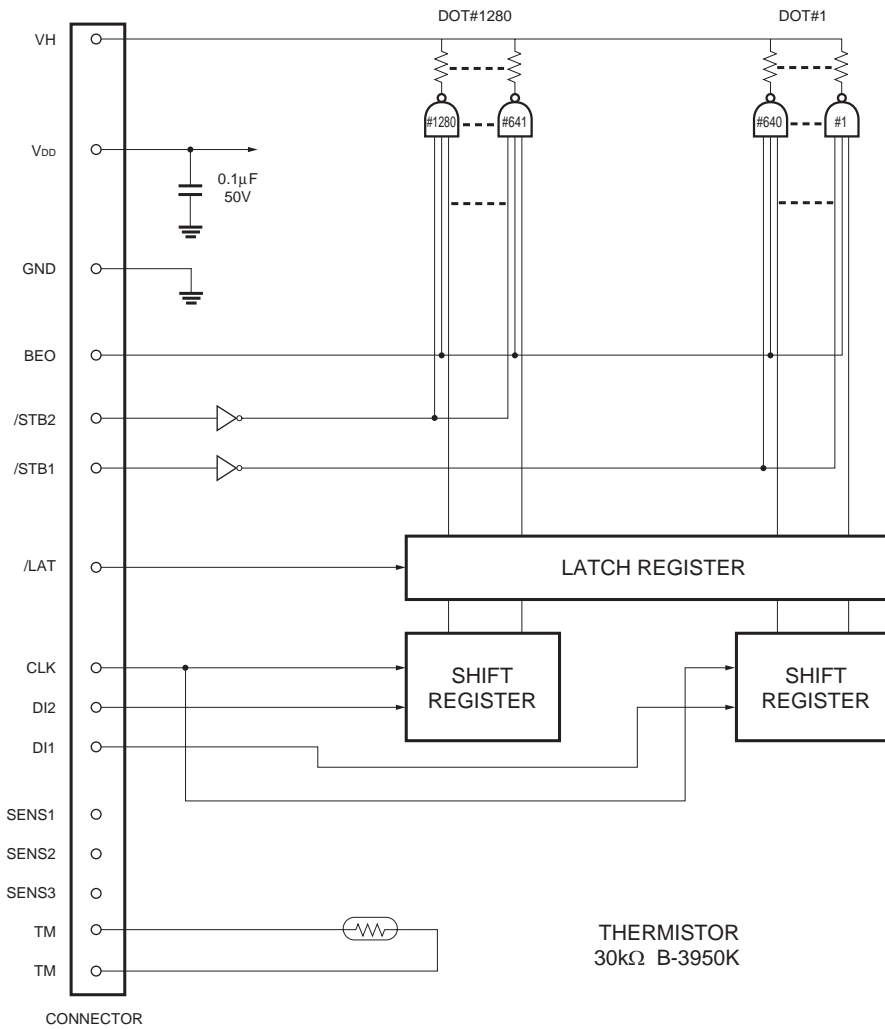
●Features

- 1) ROHM unique "STEP FREE" structure contributes to better anti-corrosion characteristics, less scratch break down, and better heat efficiency.
- 2) Thermal head contacts with the media by angle at the print, so that good print quality can be obtained for the thick media.
- 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.

●Dimensions (Unit : mm)



●Equivalent circuit



DI No.	DOT No.
DI2	1280 to 641
DI1	640 to 1

STB No.	DOT No.
/STB 2	1280 to 641
/STB 1	640 to 1

●Pin configuration

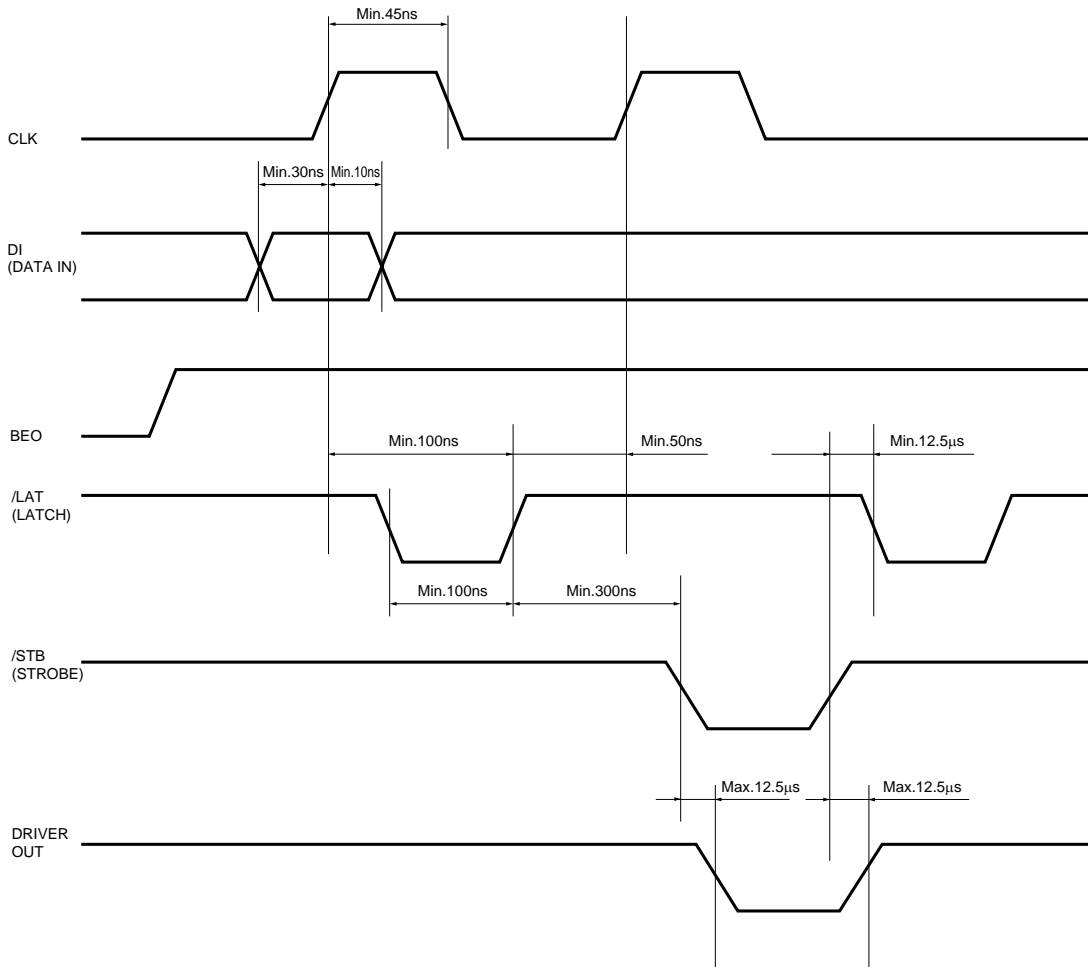
HIROSE

No.	Circuit	No.	Circuit
1	V _{DD}	2	BEO
3	GND	4	DI2
5	N.C.	6	CLK
7	LAT	8	N.C.
9	N.C.	10	DI1
11	N.C.	12	N.C.
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

●Timing chart



●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	850	Ω
Applied voltage	V _H	24	V
Applied power	P _O	0.57	W / dot
Print cycle	SLT	0.28	ms
Maximum number of dots energized simultaneously	-	1280	dots
Maximum clock frequency	-	10	MHz
Maximum roller diameter	-	$\phi 50$	mm
Running life / pulse life	-	150 / 10 ⁸	km / pulses
Operating temperature	-	5 to 45	$^{\circ}\text{C}$

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