

# Thick Film Thermal Printhead (300dpi)

## KD3002-DC92A

KD3002-DC92A is developing type of GL40 series which are developed mainly for label printers.

We have adopted low coefficient of abrasion and conductive protection coat to GL40 series which are possible for high speed and good printing quality.

That is KD3002-DC92A which is 24V standard thick film thermal print head with high speed, high quality of printing, high durability, long life, and strong resistance to abrasion.

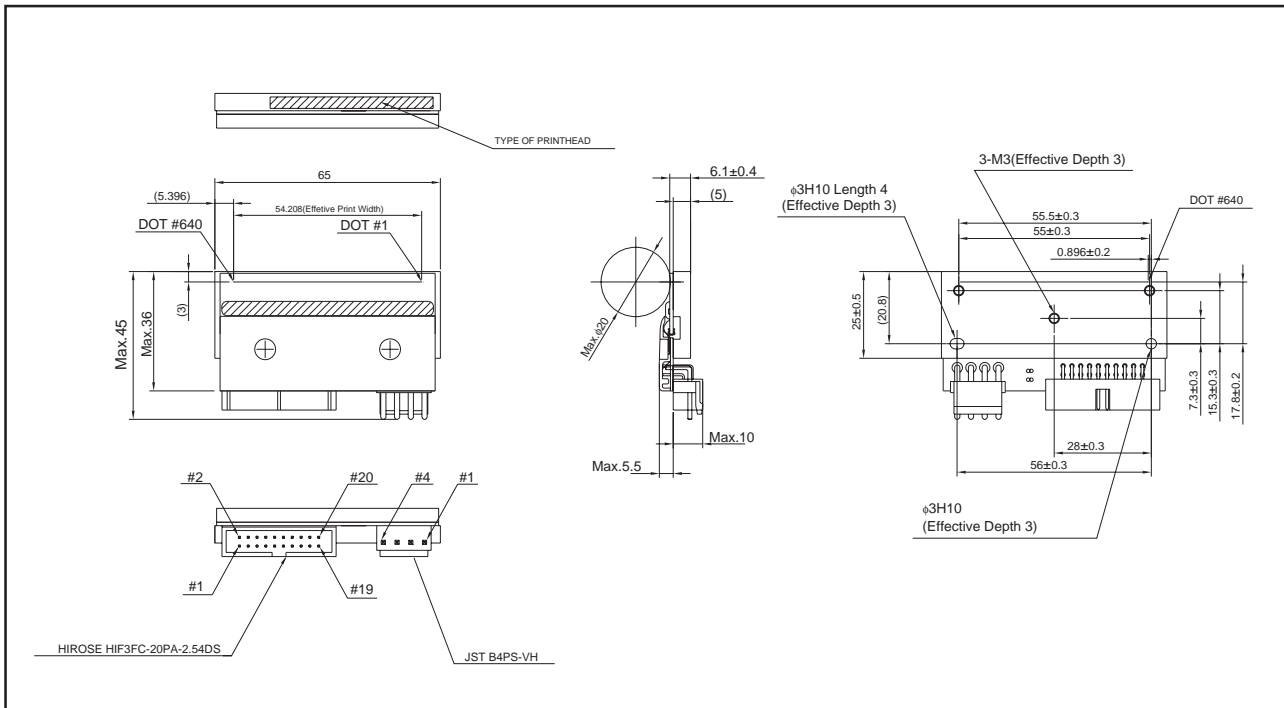
### ●Applications

- High speed label printer
- Food label printer
- High speed ticket printer
- High speed terminal printer

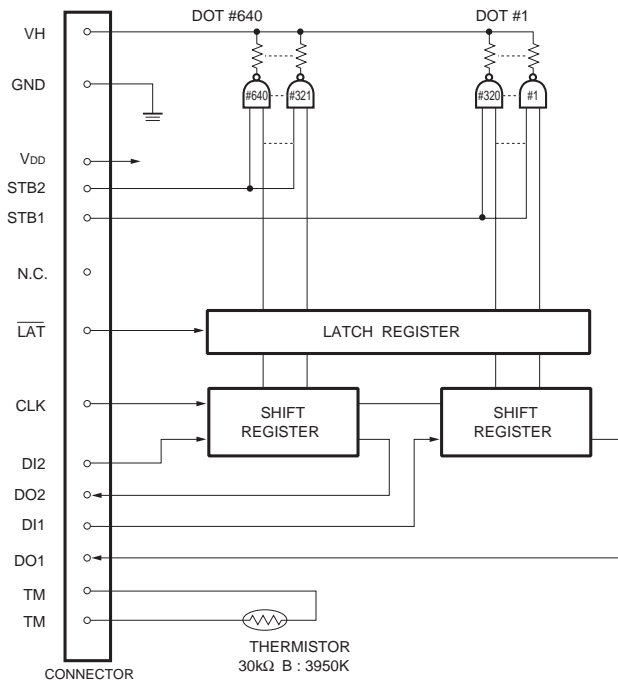
### ●Features

- 1) Perform 150km life time adopting new protective coat.  
(Perform three times life time by coefficient of abrasion which is about 1/10 of current mass-producing coat.)
- 2) Build in thermal high speeded heater and perform high printing 4 IPS. (100mm / s)
- 3) Available for thermal transfer printing by adopting specific partial glaze..

### ●Dimensions (Unit : mm)



●Equivalent circuit



DI No.	DOT No.	STB No.	DOT No.
DI1	1 to 320	STB1	1 to 320
DI2	321 to 640	STB2	321 to 640

Fig. 1

●Pin configuration

CONNECTOR A			
No.	Circuit	No.	Circuit
1	GND	11	TM
2	V <sub>DD</sub>	12	TM
3	GND	13	DI1
4	V <sub>DD</sub>	14	DO1
5	STB2	15	N.C.
6	CLK	16	N.C.
7	DI2	17	N.C.
8	DO2	18	N.C.
9	STB1	19	N.C.
10	LAT	20	N.C.

CONNECTOR B	
No.	Circuit
1	VH
2	VH
3	GND
4	GND

●Timing chart

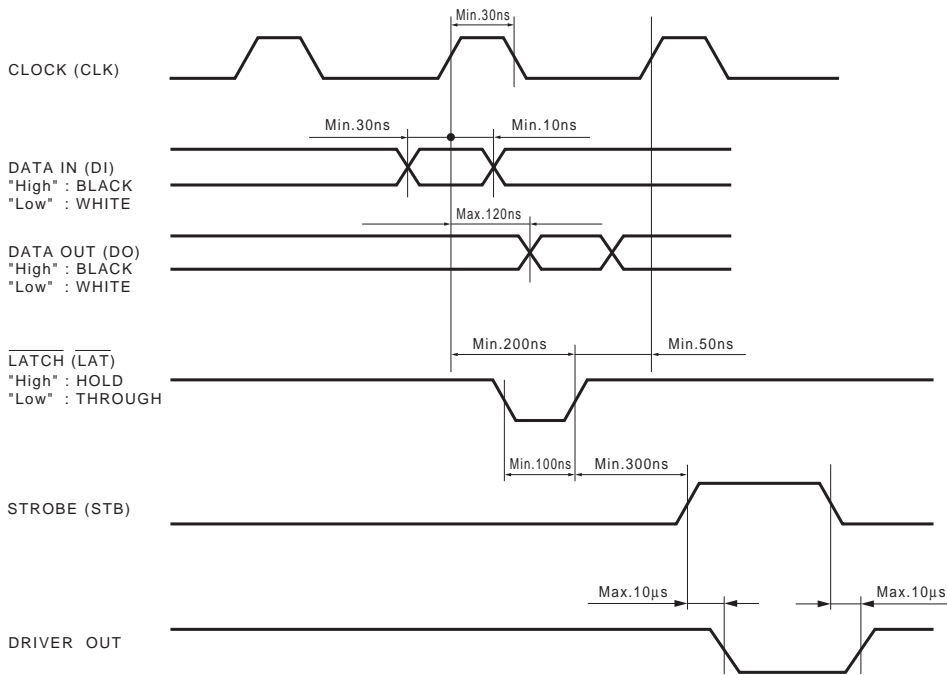


Fig.2

●Characteristics

Parameter	Symbol	Typ.	Unit
Effective printing width	—	54.21	mm
Dot pitch	—	0.0847	mm
Total dot number	—	640	dots
Average resistance value	Rave	1250	Ω
Applied voltage	V <sub>H</sub>	24	V
Applied power	P <sub>o</sub>	0.55	W / dot
Print cycle	SLT	0.83	ms
Maximum number of dots energized simultaneously	—	640	dots
Maximum clock frequency	—	12	MHz
Maximum roller diameter	—	φ20.0	mm
Running life / pulse life	—	150 / 1×10 <sup>8</sup>	km / pulses
Operating temperature	—	5 to 45	°C

●Data sheet

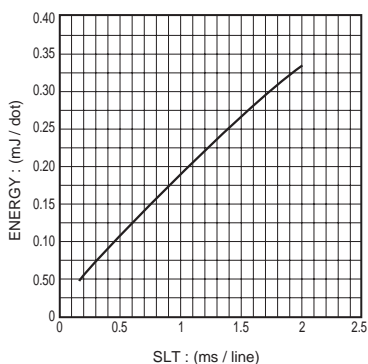


Fig.3 Maximum energy curve

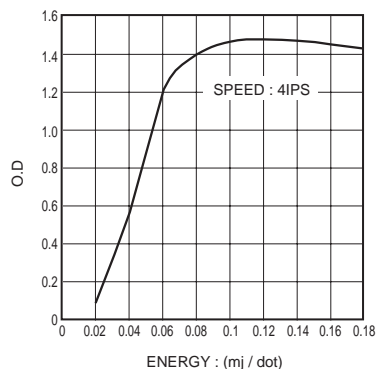


Fig.4 Representative density curve

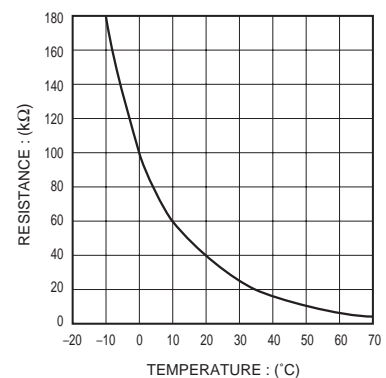


Fig.5 Thermistor curve

### 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](http://www.rohm.com)

Contact us : [webmaster@rohm.co.jp](mailto:webmaster@rohm.co.jp)