

# Thick Film Thermal Printhead (300dpi)

## KD3002-DC10A

KD3002-DC10A 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-DC10A 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.

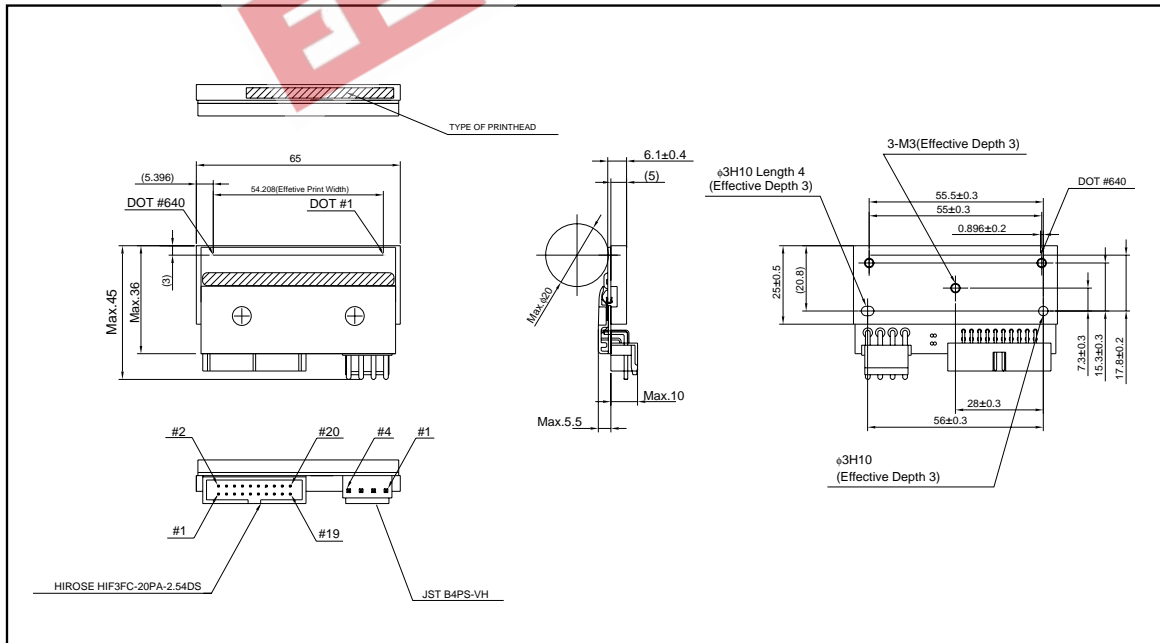
### ●Applications

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

### ●Features

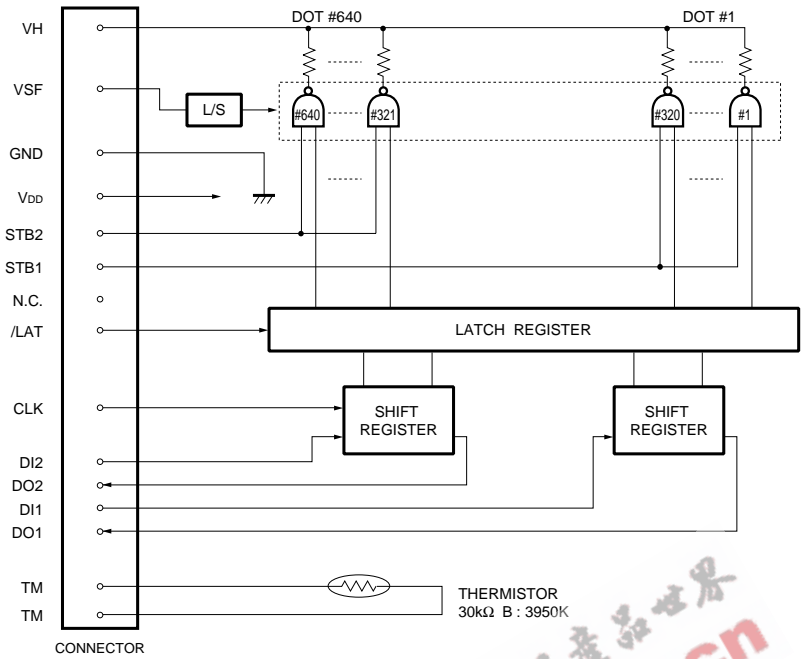
- 1) Perform 150km life time adopting new protective coat.  
(Perform three times life time by coefficient of abrasion which is about 1/10 of current mass-producing coat.)
- 2) Build in thermal high speeded heater and perform high printing 4 IPS. (100mm / s)
- 3) Available for thermal transfer printing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

### ●External dimensions (Unit : mm)



Printheads

●Equivalent circuit



VSF : Usually VSF and VH are connected.  
When measuring R value of Heat-element , VSF and VH should be separated.

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	VSF	12	TM
3	GND	13	DI1
4	VDD	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	$\overline{\text{LAT}}$	20	N.C.

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

Printheads

●Timing chart

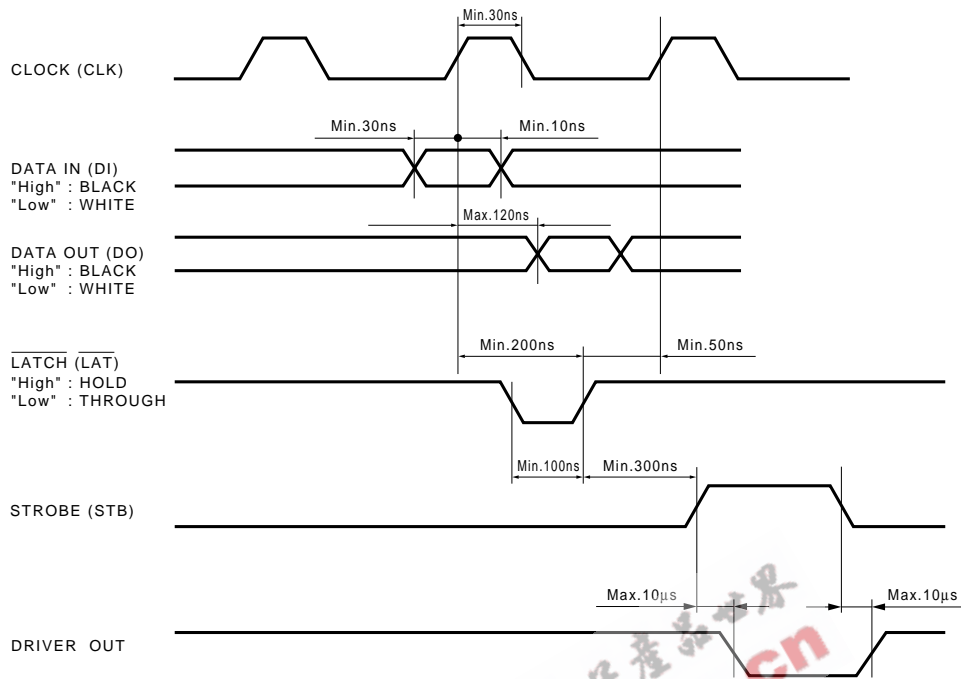


Fig.2

●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	1000	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

Printheads

●Data sheet

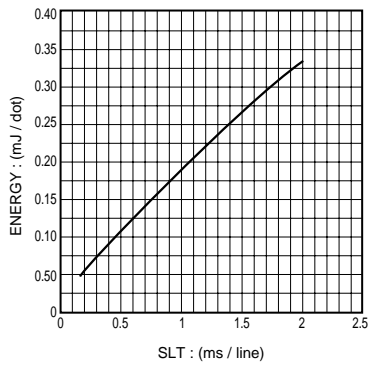


Fig.3 Maximum energy curve

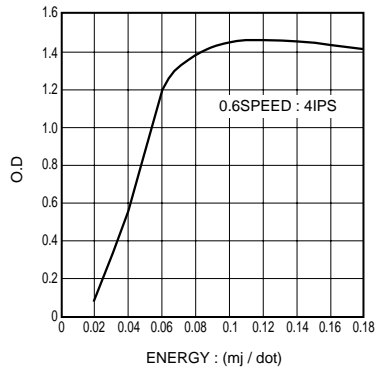


Fig.4 Representative density curve

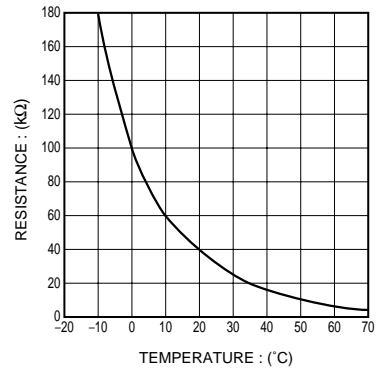


Fig.5 Thermistor curve

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