Thick film thermal printhead (with thermal historical control)

KD3002-DC70A

DC70 series has our own internally developed heat-history control function.
This product is best suited for applications which require 24 hours operation like factory production lines.

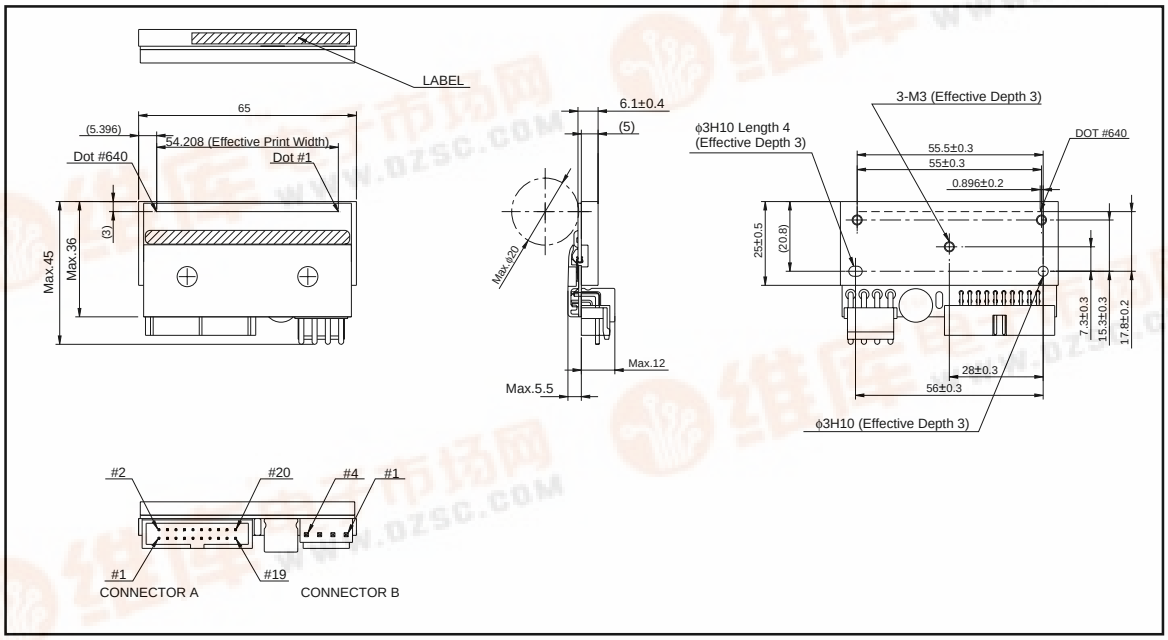
●Applications

High speed label printer
High speed bar code printer
High speed ticket printer
Various high speed terminal printers

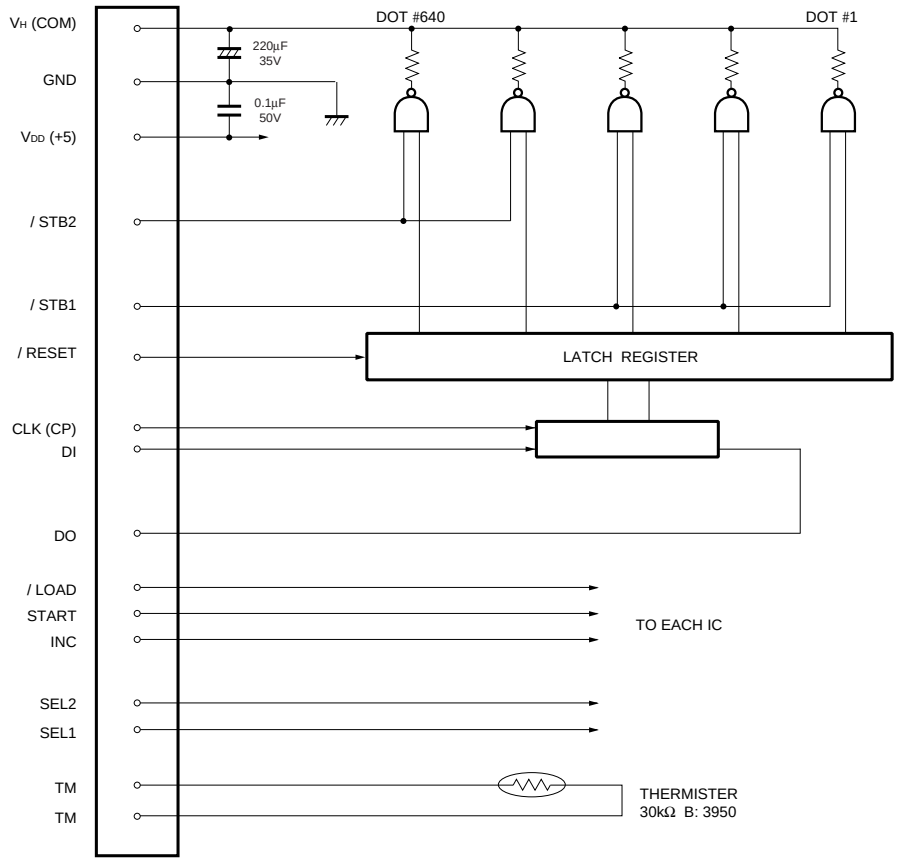
●Features

1) Newly developed thick-film fast response thermal element and driver LSI with the function of thermal history control which is added the future history control are employed for this series. It is possible to print with super high speed of 10 inches / s or 250mm / s.
2) 150km life realized by attributing durable new protection film.
3) New partial glaze construction makes it compatible with the thermal transfer application.

●External dimensions (Unit : mm)



●**Equivalent circuit**



DI No.	DOT No.
DI	640 ~ 1

/ STB No.	DOT No.
/ STB2	640 ~ 257
/ STB1	256 ~ 1

●**Pin assignments**

CONNECTOR A

No.	Circuit	No.	Circuit
1	VDD	11	/ RESET
2	VDD	12	START
3	SEL2	13	DO
4	SEL1	14	NC
5	CLK (CP)	15	TM
6	NC	16	TM
7	DI	17	/ STB2
8	NC	18	/ STB1
9	INC	19	NC
10	/ LOAD	20	NC

CONNECTOR B

No.	Circuit
1	VH (COM)
2	VH (COM)
3	GND
4	GND

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	54.208	mm
Dot pitch	–	0.0847	mm
Total dot number	–	640	dots
Average resistance value	Rave	1000	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.55	W/dot
Print cycle	SLT	0.41	ms
Maximum number of dots energized simultaneously	–	640	dots
Maximum clock frequency	–	8	MHz
Maximum roller diameter	–	ϕ20.0	mm
Running life / pulse life	–	$150/(1\times10^8)$	km/pulses
Operating temperature	–	5 to 45	°C

●Data sheets

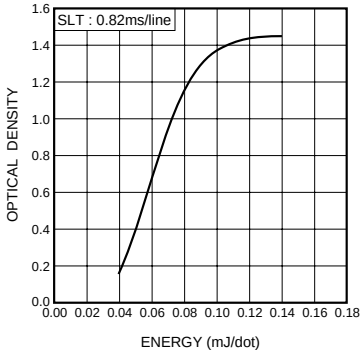


Fig.2 Representative density curve

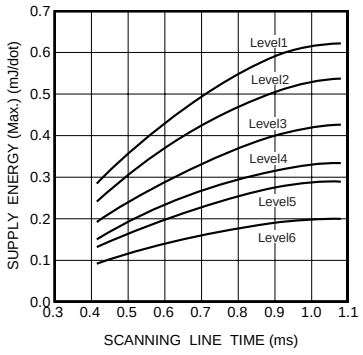


Fig.3 Maximum energy curve

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