

Thick film thermal printhead (8 dots / mm)

KF2003-GL50A

The KF2003-GL50A is a 24 V standard thick film thermal printhead with a printing speed up to 6 inches / s that has been developed mainly for label printer use.

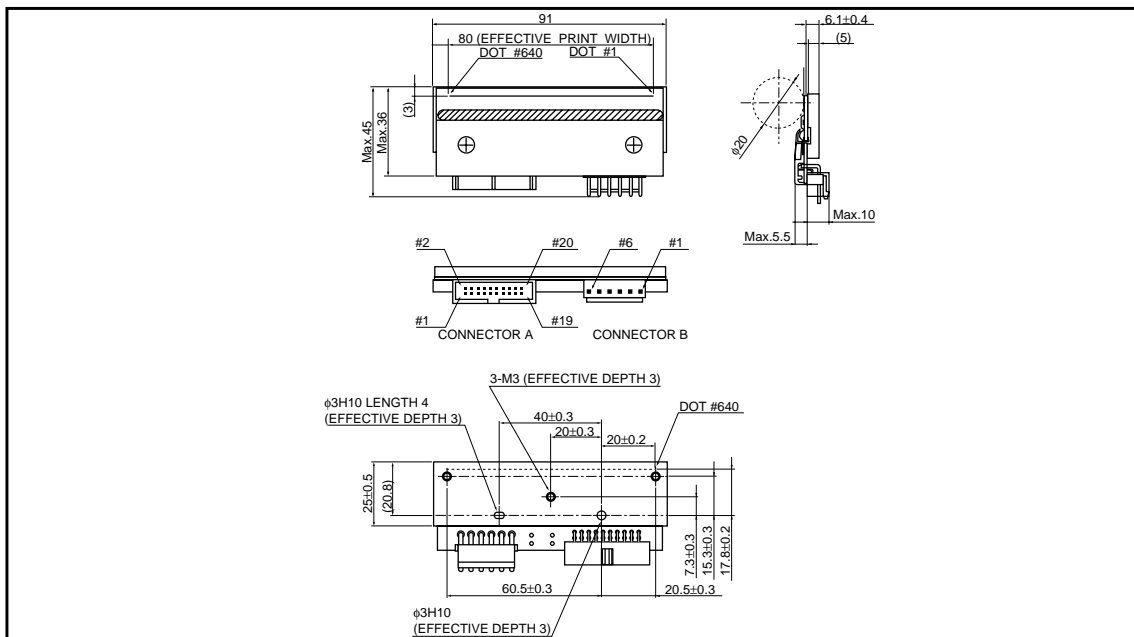
●Applications

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

●Features

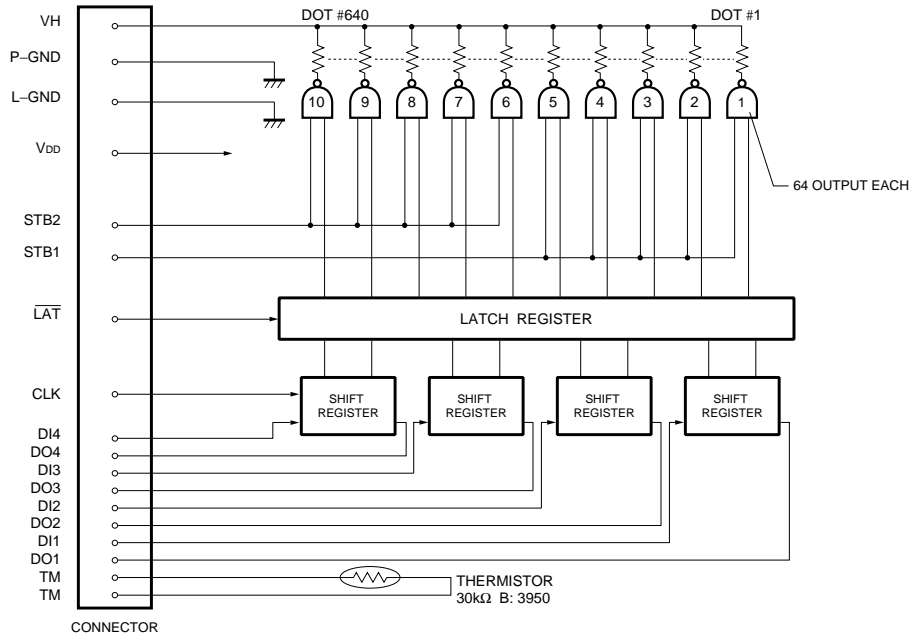
- 1) Newly developed thick-film fast response thermal element is employed for this series and 6 inches / s or 150 mm / s is possible without thermal history control. It is possible to print 10 inches / s or 250 mm / s if external thermal history control is used.
- 2) 150km life realized for GL50 by attributing durable new protection film.
- 3) New partial glaze construction makes it compatible with the thermal transfer application.
- 4) Market-proven G-series printhead construction ensures high reliability.

●External dimensions (Units : mm)



Printheads

●Equivalent circuit



DI No.	DOT No.
DI1	1~192
DI2	193~320
DI3	321~512
DI4	513~640

STB No.	DOT No.
STB1	1~ 320
STB2	321~ 640

Fig. 1

●Pin assignments

CONNECTOR A			
No.	Circuit	No.	Circuit
1	L-GND	11	TM
2	V _{DD}	12	TM
3	L-GND	13	DI3
4	V _{DD}	14	DO3
5	STB2	15	DI2
6	CLK	16	DO2
7	DI4	17	N.C.
8	DO4	18	STB1
9	N.C.	19	DI1
10	LAT	20	DO1

CONNECTOR B	
No.	Circuit
1	VH
2	VH
3	VH
4	P-GND
5	P-GND
6	P-GND

L-GND: LOGIC GROUND
P-GND: POWER GROUND

Printheads

●Timing chart

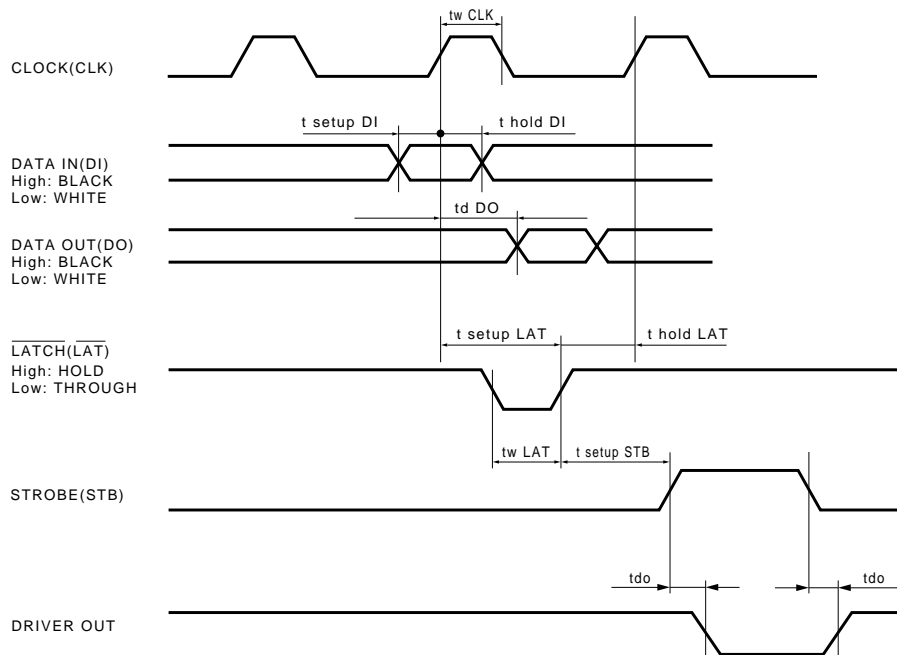


Fig.2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	-	80	mm
Dot pitch	-	0.125	mm
Total dot number	-	640	dots
Average resistance value	Rave	550	Ω
Applied voltage	V _H	24	V
Applied power	P _o	0.92	W / dot
Print cycle	SLT	0.82	ms
Pulse width	T _{ON}	0.26	ms
Maximum number of dots energized simultaneously	-	384	dots
Maximum clock frequency	-	8	MHz
Maximum roller diameter	-	$\phi 20.0$	mm
Running life / pulse life	-	150 / (1×10 ⁸)	km / pulses
Operating temperature	-	5-45	°C