Thick film thermal printhead (8 dots / mm)

KF2003-GL41A

The KF2003-GL41A is a 24 V standard thick film thermal printhead with a printing speed up to 6 inch / second that has been developed mainly for label printer use. (This product is a development product, so please contact ROHM for more details.)

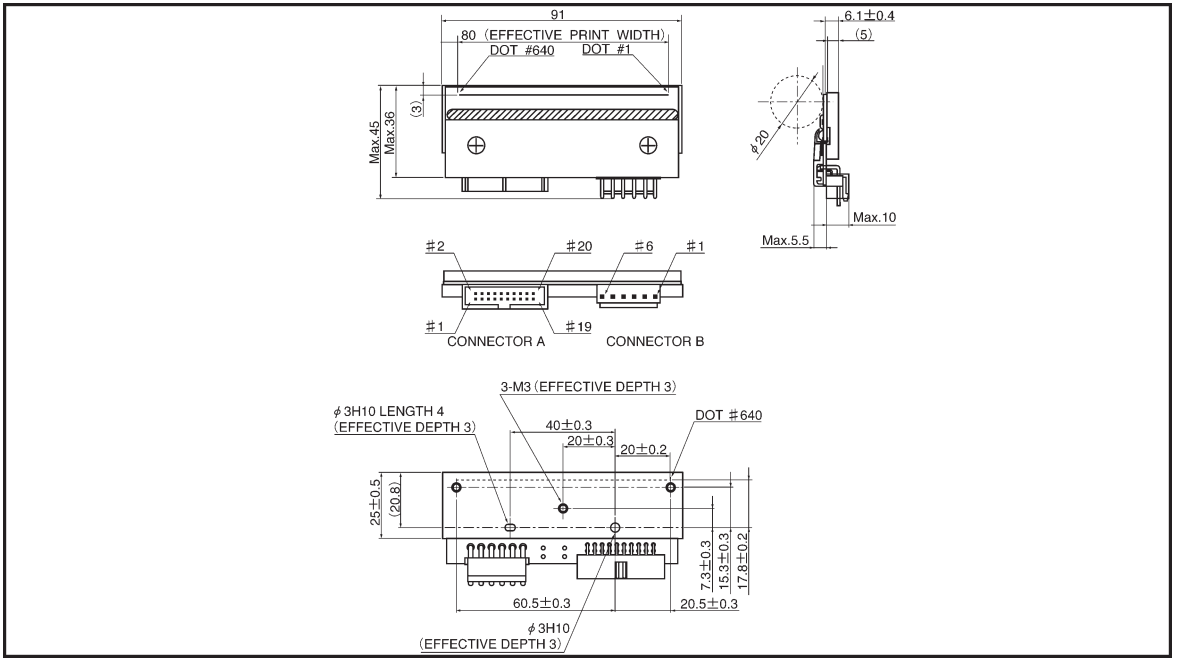
●Applications

High-speed barcode label printer
High-speed ticket printer
High-speed multi-purpose small-sized printers

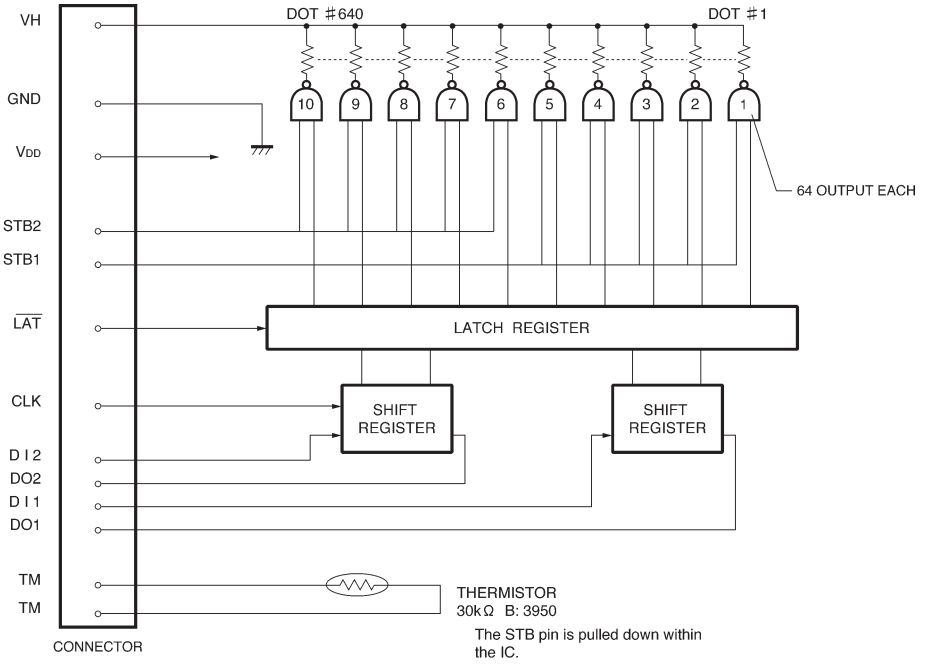
●Features

1) With the newly designed thick film high-speed heater, the KF2003-GL41A achieves high-speed printing of up to 6 inch / second (150 mm / second) without heat history control. With heat history control, the super high speed of 10 inch / second (250 mm / second) is also supported.
2) The use of the hard highly-durable conductive protective film ensures a long product life.
3) Uses a special partial glaze construction for support of thermal transfer printing.
4) Uses the thick film G-series structure (see “Features” on page 138) to provide you the proven record that the G-series has attained on the market.

●External dimensions (Units: mm)



●Equivalent circuit



DI No.	DOT No.
DI 1	1～320
DI 2	321～640

STB No.	DOT No.
STB 1	1～320
STB 2	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	D I 3
4	V_{DD}	14	DO3
5	STB2	15	D I 2
6	CLK	16	DO2
7	D I 4	17	N.C.
8	DO4	18	STB1
9	N.C.	19	D I 1
10	$\overline{LAT}$	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

●Timing chart

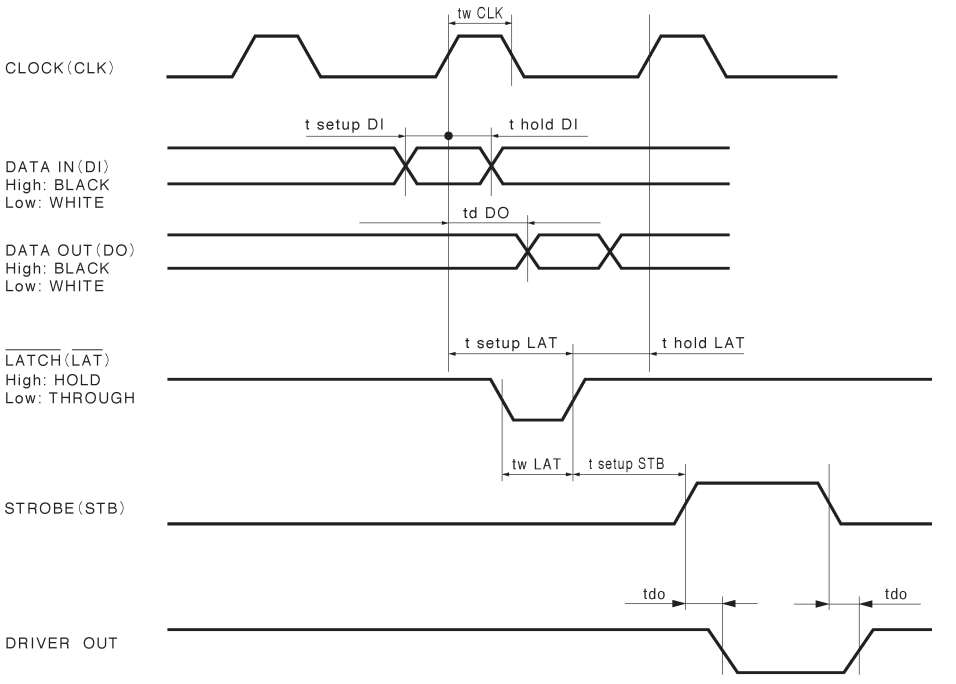


Fig.2

●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	—	ϕ20.0	mm
Running life / pulse life	—	50 / 5×10^7	km / pulses
Operating temperature	—	5～45	℃