

# Thick film thermal printhead (8 dots / mm)

## KF2004-GL41A

The KF2004-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.)

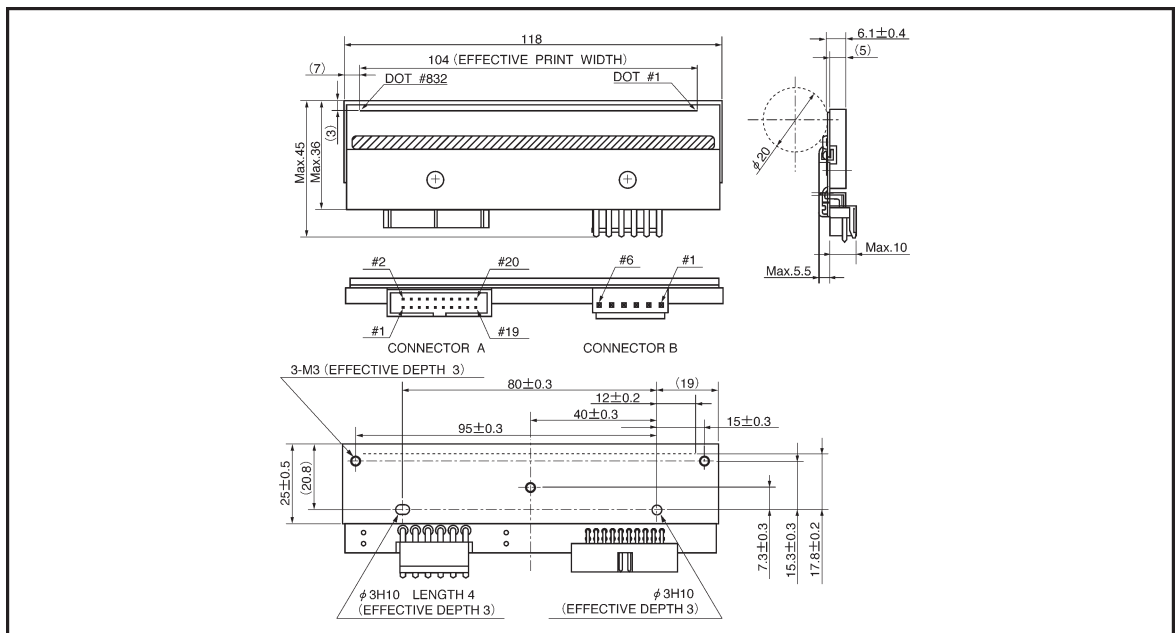
●Applications

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

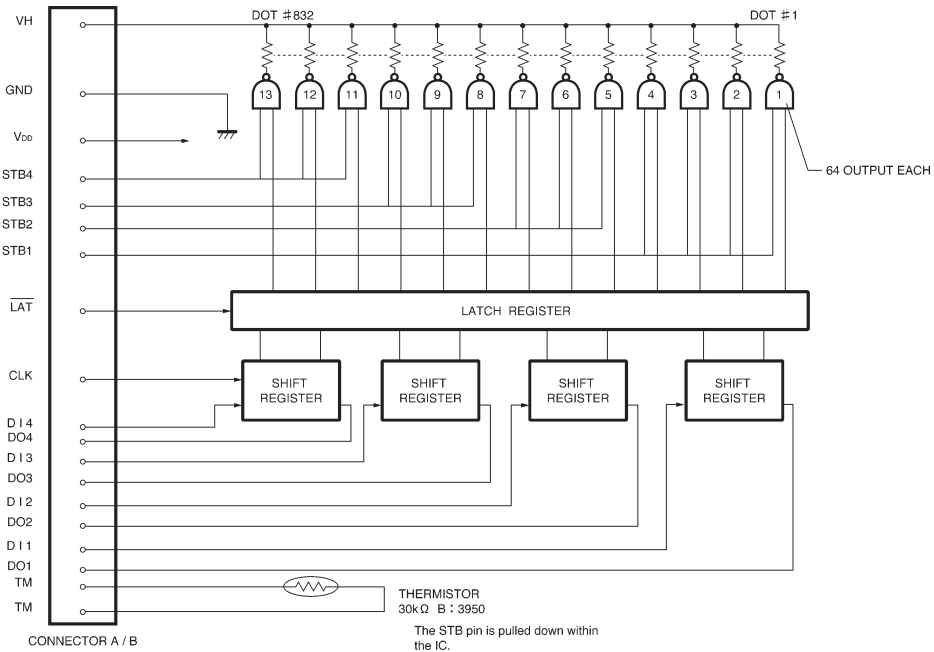
●Features

- 1) With the newly designed thick film high-speed heater, the KF2004-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 achievable.
- 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	1~256
DI 2	257~448
DI 3	449~640
DI 4	641~832

STB No.	DOT No.
STB1	1~256
STB2	257~448
STB3	449~640
STB4	641~832

Fig.1

●Pin assignments

CONNECTOR A

No.	Circuit	No.	Circuit
1	L-GND	11	TM
2	V <sub>DD</sub>	12	TM
3	L-GND	13	DI3
4	V <sub>DD</sub>	14	DO3
5	STB4	15	DI 2
6	CLK	16	DO2
7	DI 4	17	STB2
8	DO4	18	STB1
9	STB3	19	DI 1
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

●Timing chart

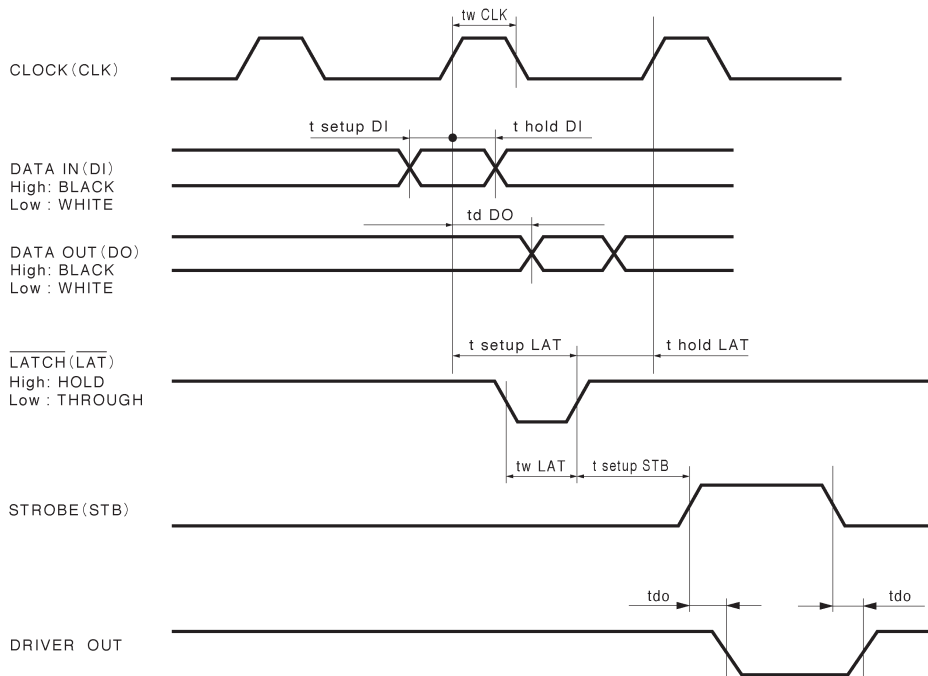


Fig.2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	104	mm
Dot pitch	—	0.125	mm
Total dot number	—	832	dots
Average resistance value	Rave	550	$\Omega$
Applied voltage	$V_H$	24	V
Applied power	$P_O$	0.90	W / dot
Print cycle	SLT	0.82	ms
Pulse width	$T_{ON}$	0.27	ms
Maximum number of dots energized simultaneously	—	448	dots
Maximum clock frequency	—	8	MHz
Maximum roller diameter	—	$\phi 20.0$	mm
Running life / pulse life	—	$50 / 5 \times 10^7$	km / pulses
Operating temperature	—	5~45	$^{\circ}C$