

# Thick film thermal printhead (8 dots / mm)

## KF2008-GR10A

The KF2008-GR10A is a A4-size thick-film thermal printhead, developed mainly for plain-paper fax machines and portable printers. The KF2008-GR10A and the KF2008-GH10A are pin for pin compatible. This makes conversion of printers from thermal transfers to direct thermal easier.

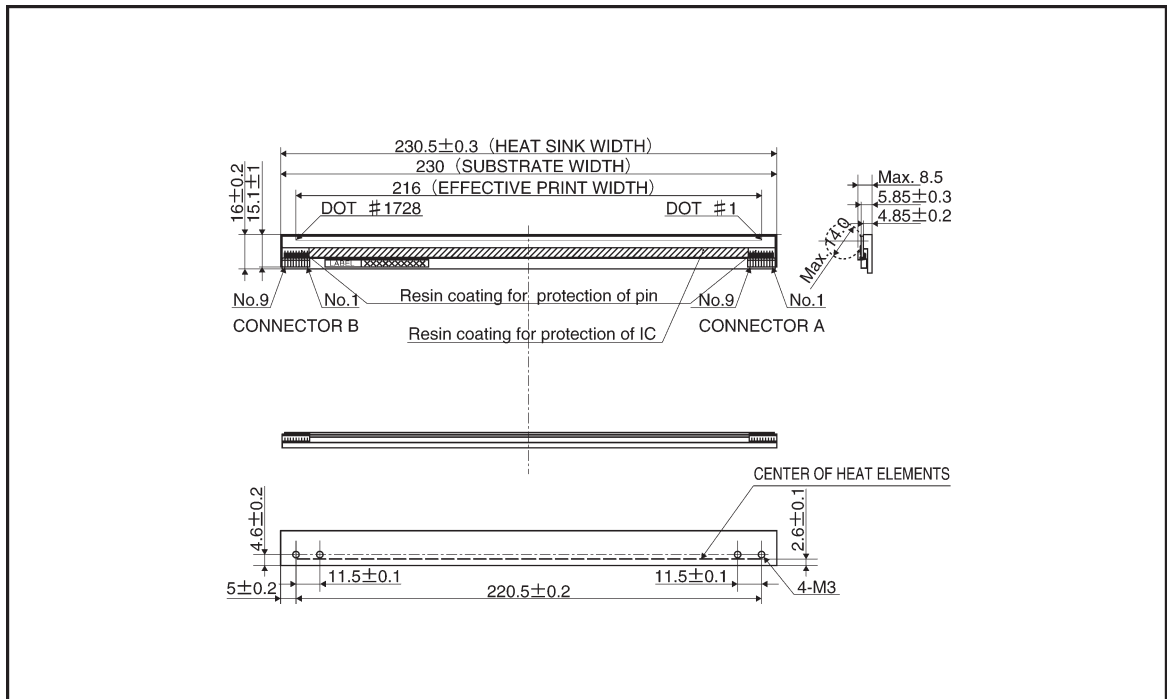
●Applications

- Plain-paper facsimiles
- Portable printers
- Low speed ticket vendors
- Measuring terminal printers

●Features

- 1) A new pin connector structure greatly reduces the size and weight.
- 2) A newly developed 144-bit IC levels the strobe partition and reduces the noise level.
- 3) One rank resistance value of  $3000 \Omega \pm 3\%$  eliminates the inconvenience of rank selection.
- 4) Thick film type with glazed components provides good printing quality on rough paper.

●External dimensions (Units: mm)



●Equivalent circuit

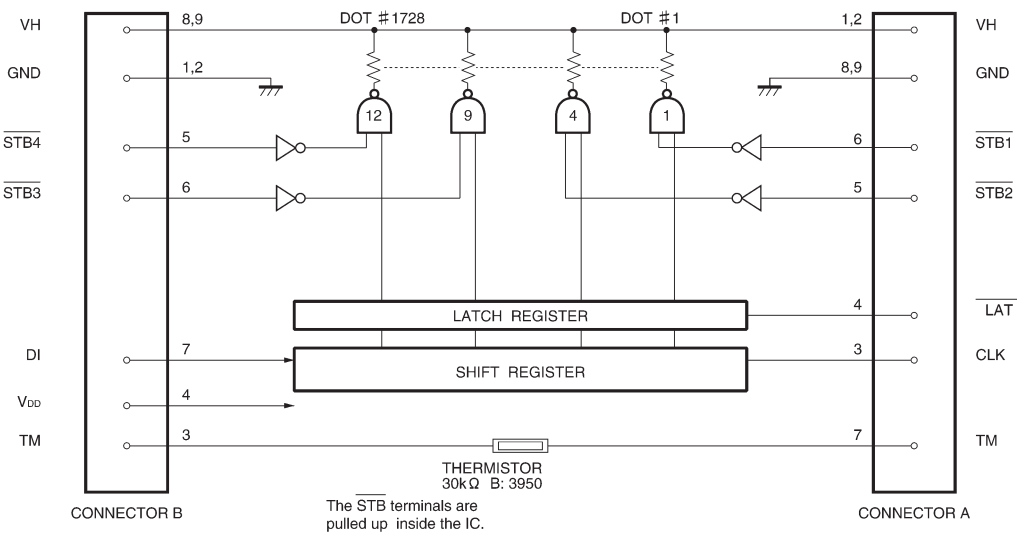


Fig. 1

●Pin assignments

CONNECTOR B	
No.	Circuit
1	GND
2	GND
3	TM
4	V <sub>DD</sub>
5	STB4
6	STB3
7	DI
8	VH
9	VH

CONNECTOR A	
No.	Circuit
1	VH
2	VH
3	CLK
4	LAT
5	STB2
6	STB1
7	TM
8	GND
9	GND

●Timing chart

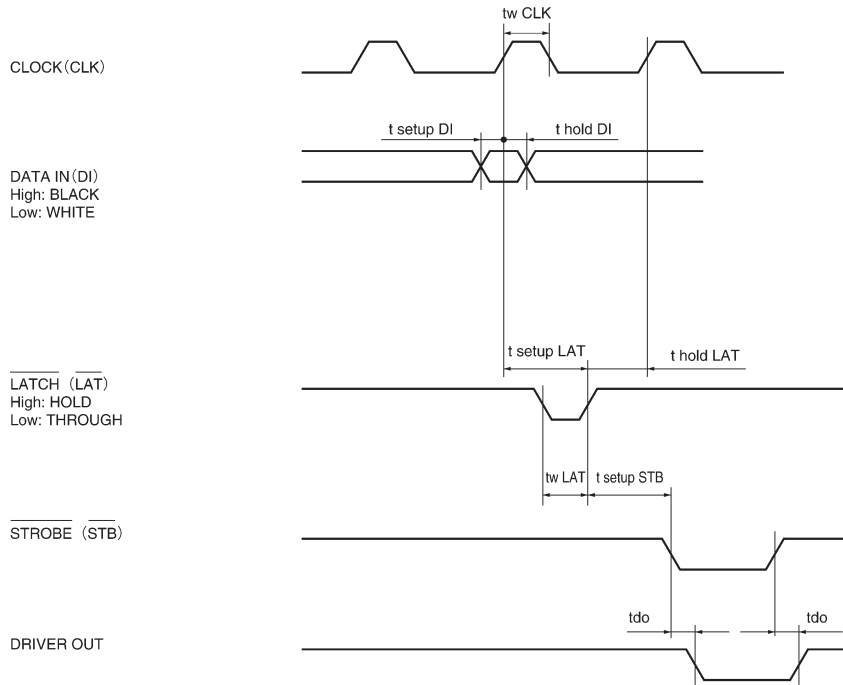


Fig.2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	216.0	mm
Dot pitch	—	0.125	mm
Total dot number	—	1728	dots
Average resistance value	R <sub>ave</sub>	3000	Ω
Applied voltage	V <sub>H</sub>	24.0	V
Applied power	P <sub>O</sub>	0.17	W / dot
Print cycle	SLT	10	ms
Pulse width	T <sub>ON</sub>	1.95	ms
Maximum number of dots energized simultaneously	—	432	dots
Maximum clock frequency	—	4	MHz
Maximum roller diameter	—	14.0	mm
Running life / pulse life	—	20 / 3 × 10 <sup>7</sup>	km / pulses
Operating temperature	—	5~45	°C

●Electrical characteristic curves

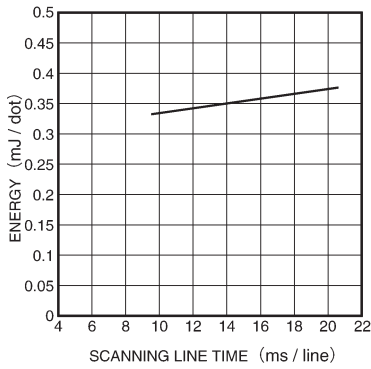


Fig. 3 Adaptive speed chart

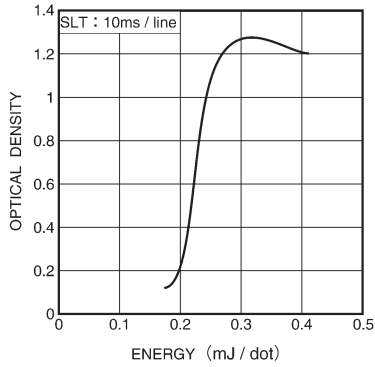


Fig. 4 Representative density curve

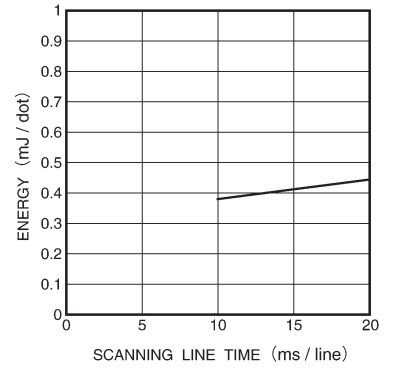


Fig. 5 Maximum energy curve

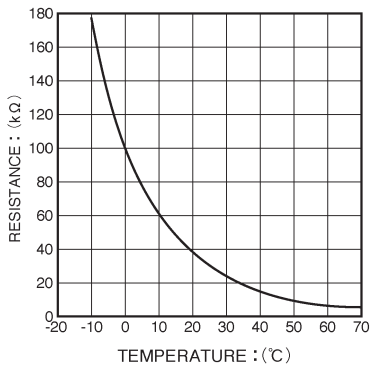


Fig. 6 Thermistor curve