Thick film thermal printhead (8 dots / mm)

KF2008-GK11A

The KF2008-GK11A uses a highly-durable conductive protective film to handle label papers with topcoatings. With ROHM's partial glaze construction, the KF2008-GK11A is a compact and lightweight thick-film thermal print head with printing speeds up to 3 inch / second.

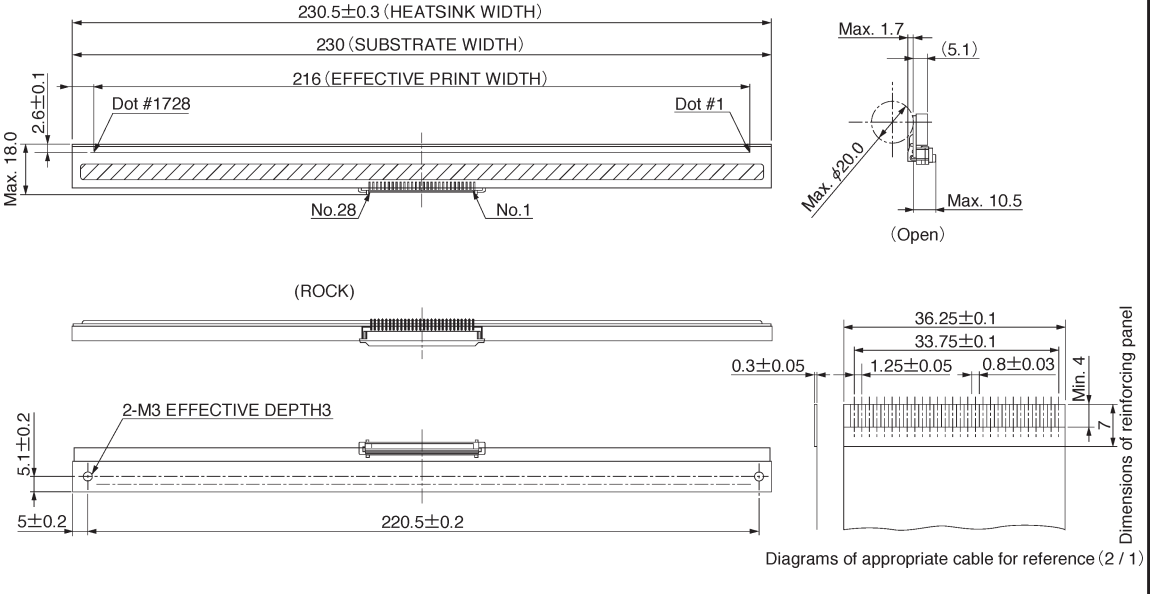
●Applications

POS terminals
Label printers
CAT terminals
Multi-purpose small-sized printers

●Features

1) The use of the newly developed highly-durable conductive protective film has improved countermeasures against static electricity (ESD).
2) Acheives an even smaller size and lighter weight by ROHM's original clip connector design and newly developed FFC (full flat cable) specifications.
3) A newly developed 144-bit IC levels the strobe partition and reduces the noise level.
4) One rank resistance value of 1500 Ω ± 3% eliminates the inconvenience of rank selection.
5) 2-inch, 3-inch, 4-inch, and 8-inch series are available.

●External dimensions (Units: mm)



Diagrams of appropriate cable for reference (2 / 1)

●Equivalent circuit

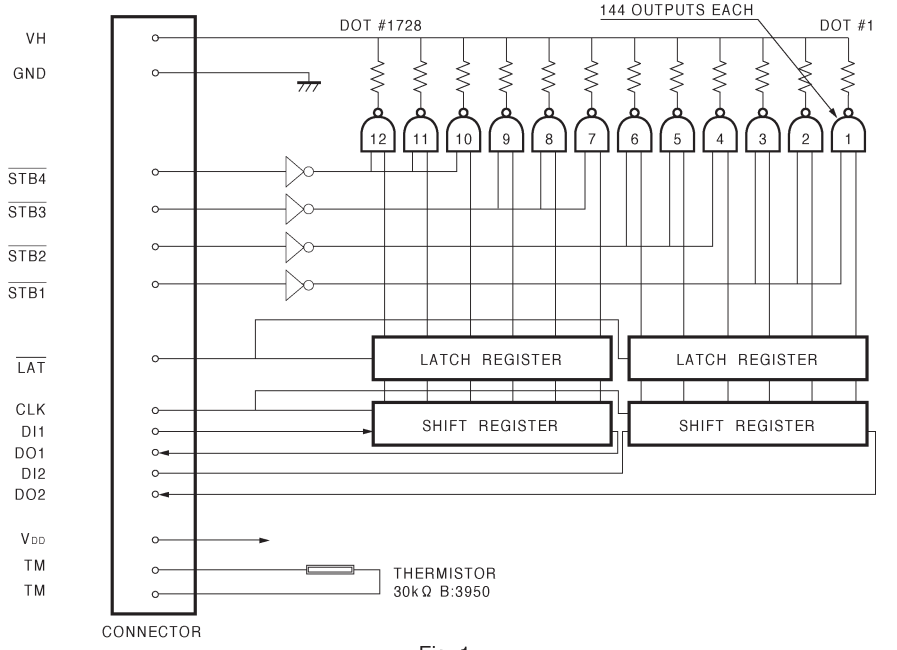


Fig. 1

●Pin assignments

No.	Circuit
1	VH
2	VH
3	VH
4	DO2
5	DI2
6	CLK
7	$\overline{LAT}$
8	$\overline{STB1}$
9	$\overline{STB2}$
10	TM
11	GND
12	GND
13	GND
14	GND

No.	Circuit
15	GND
16	GND
17	GND
18	GND
19	TM
20	V_{DD}
21	$\overline{STB3}$
22	$\overline{STB4}$
23	DO1
24	DI1
25	VH
26	VH
27	VH
28	VH

●Timing chart

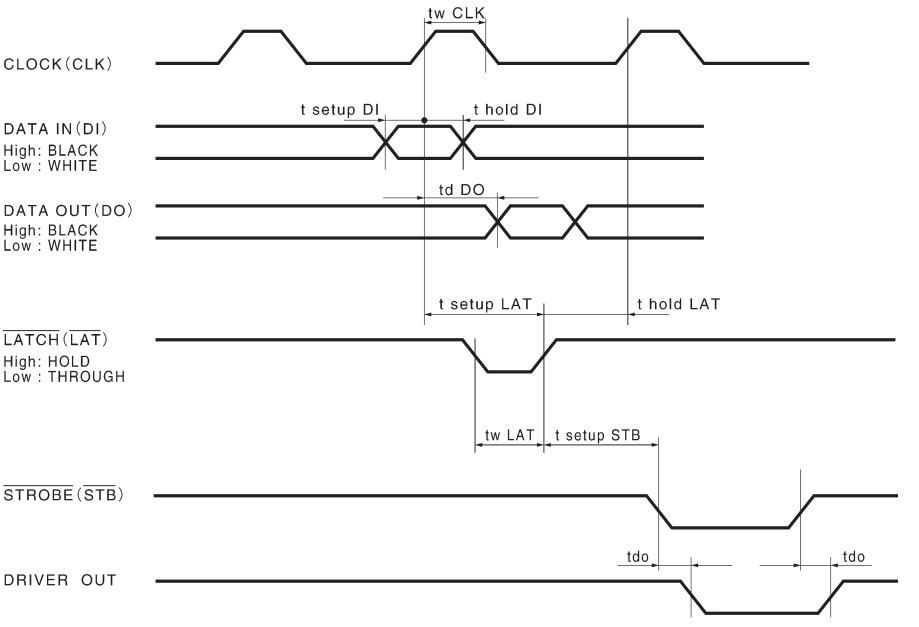


Fig. 2

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	—	216.0	mm
Dot pitch	—	0.125	mm
Total dot number	—	1728	dots
Average resistance value	Rave	1500	Ω
Applied voltage	V_H	24.0	V
Applied power	P_O	0.30	W / dot
Print cycle	SLT	5.0	ms
Pulse width	T_{ON}	0.80	ms
Maximum number of dots energized simultaneously	—	432	dots
Maximum clock frequency	—	4	MHz
Maximum roller diameter	—	14.0	mm
Running life / pulse life	—	$20 / 3 \times 10^7$	km / pulses
Operating temperature	—	5～45	℃

●Electrical characteristic curves

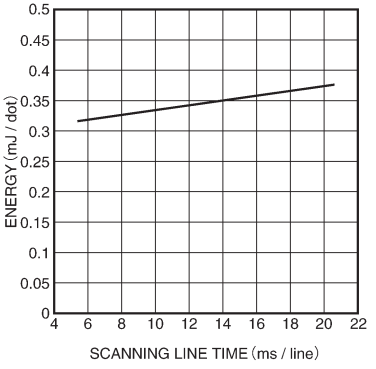


Fig. 3 Adaptive speed chart

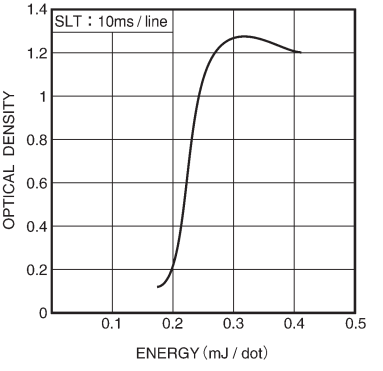


Fig. 4 Representative density curve

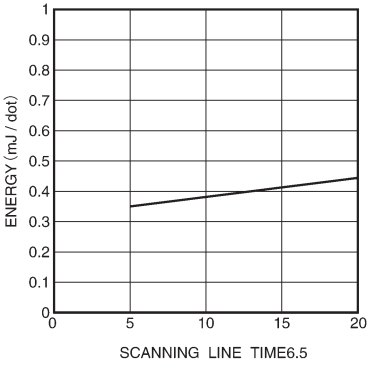


Fig. 5 Maximum energy curve

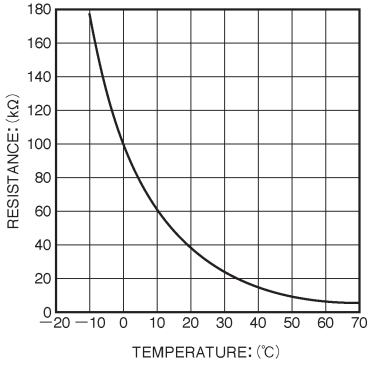


Fig. 6 Thermistor curve