Compact medium speed thick film thermal printhead (8 dots / mm) KF2004-GD10A

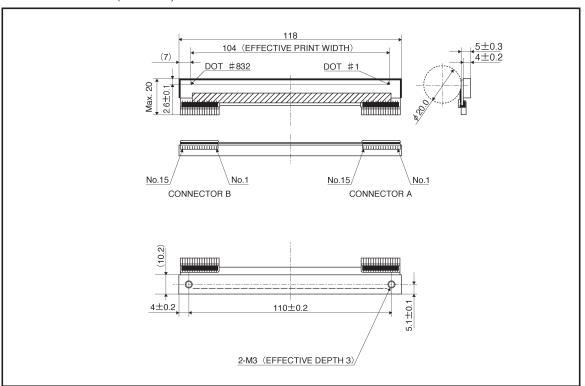
The KF2004-GD10A is a standard 24 V thick-film thermal printhead with a printing speed of 4 inches / second, developed mainly for label printers. The GD series is of the glazed component type and therefore excellent for termal transfer printing.

ApplicationsLabel printersTicket printersTerminal printers

Features

- 1) A new pin connector structure greatly reduces the size and weight.
- A newly developed driving IC improves data transmission speed (8MHz) and ON resistance (half of the conventional product) to support various control methods.
- 3) One rank resistance value of 800 $\Omega\pm3\%$ eliminates the inconvenience of rank selection.
- 4) 2-inch, 3-inch and 4-inch series are available.

External dimensions (Units: mm)



Printheads KF2004-GD10A

Equivalent circuit

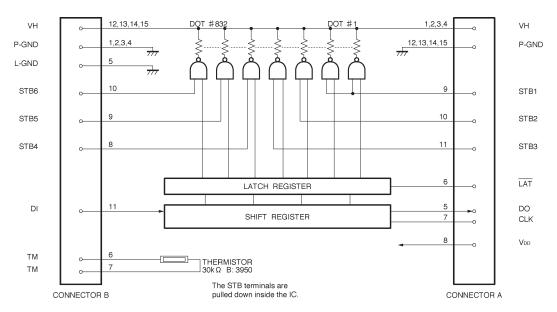


Fig. 1

Pin assignmentsCONNECTOR B

CONNECTOR B				
No.	Circuit			
1	P-GND			
2	P-GND			
3	P-GND			
4	P-GND			
5	L-GND			
6	TM			
7	TM			
8	STB4			
9	STB5			
10	STB6			
11	DI			
12	VH			
13	VH			
14	VH			
15	VH			

CONNECTOR A				
No.	Circuit			
1	VH			
2	VH			
3	VH			
4	VH			
5	DO			
6	LAT			
7	CLK			
8	V _{DD}			
9	STB1			
10	STB2			
11	STB3			
12	P-GND			
13	P-GND			
14	P-GND			
15	P-GND			

L-GND: LOGIC GROUND P-GND: POWER GROUND Printheads KF2004-GD10A

Timing chart

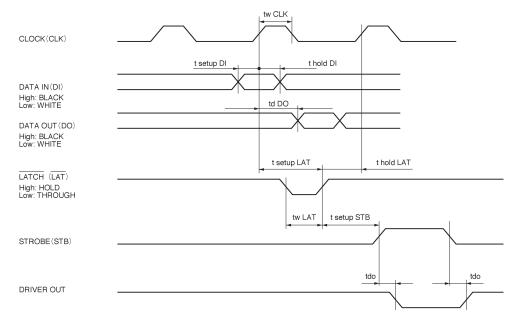


Fig. 2

Characteristics

Parameter		Typical	Unit
Effective printing width		104	mm
Dot pitch		0.125	mm
Total dot number		448	dots
Average resistance value	Rave	800	Ω
Applied voltage	Vн	24	V
Applied power	Po	0.61	W / dot
Print cycle	SLT	1.25	ms
Pulse width	Ton	0.28	ms
Maximum number of dots energized simultaneously	_	448	dots
Maximum clock frequency	_	8	MHz
Maximum roller diameter	_	φ 20.0	mm
Running life / pulse life	_	50 / 5×10 ⁷	km / pulses
Operating temperature	_	5~45	င

Printheads KF2004-GD10A

Electrical characteristic curves

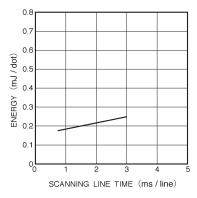


Fig. 3 Adaptive speed chart

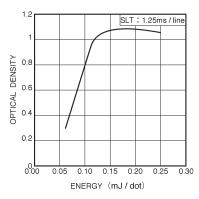


Fig. 4 Representative density curve

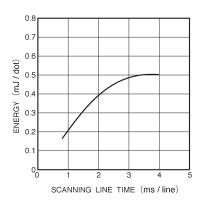


Fig. 5 Maximum energy curve

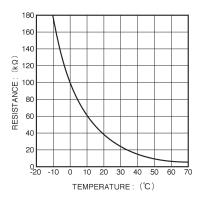


Fig. 6 Thermistor curve