

For Packaging High-speed Printers AH Series AH2002-DC50A

Data Sheet

Ideal for packaging printers requiring high reliability.

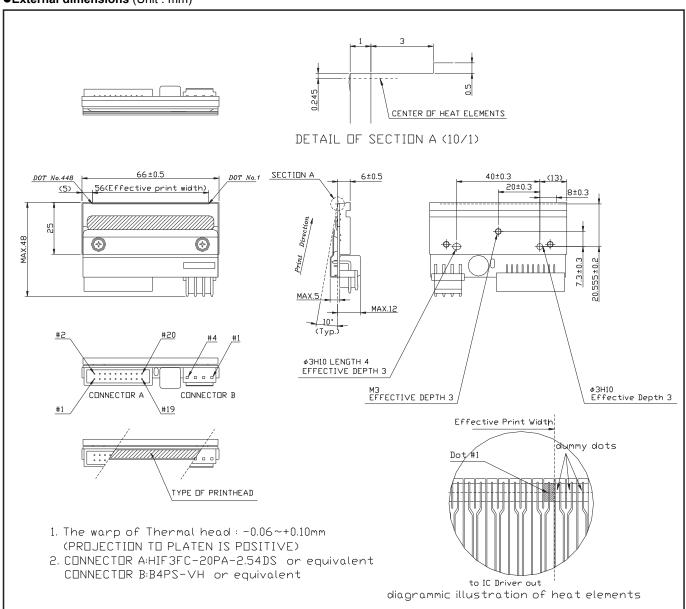
Applications

Distribution / Food label printers Packaging printers Date-code printers

Features

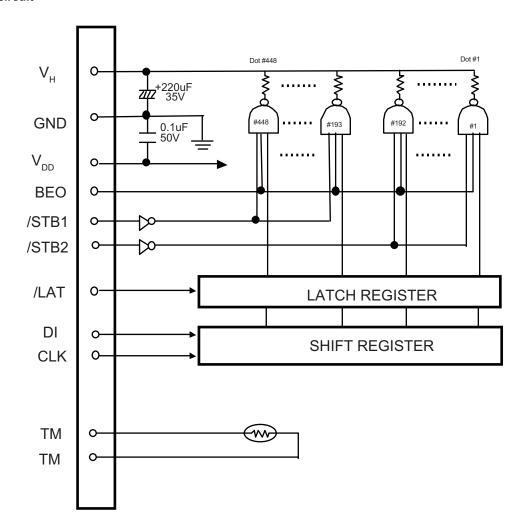
These thermal heads feature a near-edge structure based on the high-speed, high-quality, reliable step-free SE, SF series, enabling straight path for hand media or high speed printing

●External dimensions (Unit : mm)



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●Equivalent circuit



DI, STB DIVISION DOT No. CORRESPONDENCE

DI No.	DOT No.	
DI	448 to 1	

/STB No.	DOT No.
/STB 2	448 to 193
/STB 1	192 to 1

AH2002-DC50A **Data Sheet**

Pin assignments

Connector A: HIF3FC-20PA-2.54DS or equivalent

No.	Circuit	No.	Circuit	
1	V_{DD}	2	BEO	
3	GND	4	DI	
5	N.C.	6	CLK	
7	/LAT	8	GND	
9	GND	10	N.C.	
11	N.C.	12	GND	
13	V_{DD}	14	/STB2	
15	/STB1	16	TM	
17	TM	18	SENS1	
19	SENS2	20	SENS3	

CONNECTOR B: B4PS-VH-2.2(LF)(SN) or equivalent

No.	Circuit	No.	Circuit	
1	V _H	2	V _H	
3	GND	4	GND	

Pin number: Refer to External dimensions

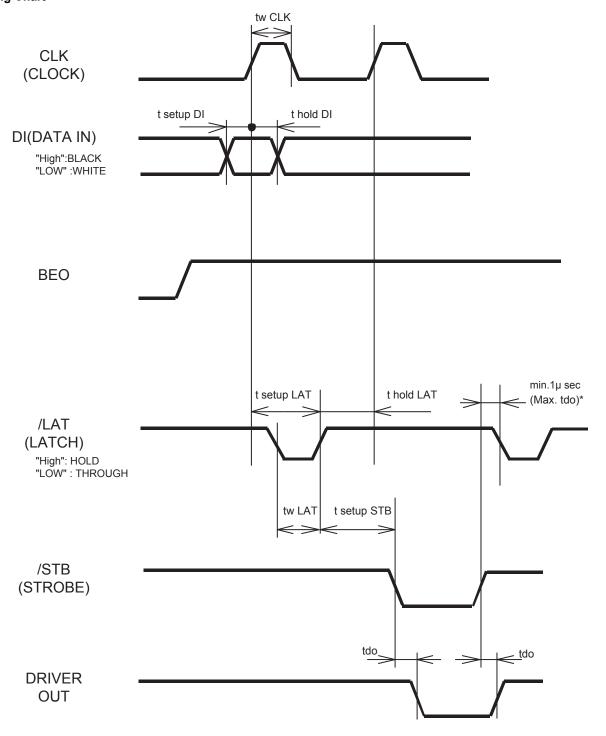
DI: Data In (Serial Input)

CLK : Clock Pulse(Max Transfer Frequency)
/LAT: Data Latch

TM: Thermistor /STBn: Strobe

V_{DD}: Power Supply for Driver IC N.C.: Non Connection

• Timing Chart



^{*}If delay time for Driver Out can not be secured enough, there is a possibility that VH would fluctuate greatly. Please design the circuit so that VH does not exceed peak voltage (Vp).

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Characteristics

Parameter	symbol	Typical	Unit
Effective printing width	-	56	mm
Dot pitch	-	0.125	mm
Total dot number	-	448	dots
Average resistance value	R _{ave}	850	Ω
Applied voltage	V _H	24	V
Applied power	Po	0.59	W/dot
Print cycle	SLT	1.5	ms/line
Pulse width	T _{ON}	0.36	ms
Maximum number of dots energized simultaneously	-	448	dots
Maximum clock frequency	-	10	MHz
Maximum platen diameter	-	∞	mm
Running life / pulse life	-	50/1×10 ⁸	Km/pulse
Operating temperature	-	5 to 45	°C

Notes

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