Near edge type thermal printhead(11.81dots / mm)

SH3002-DC90A

SH-DC90 series achieves high quality print and high reliability, by Rohm unique Step Free Technology.
SH-DC90 series is near edge type thermal head, whose heater line is formed at the angle of the glaze. Therefore, peeling-off ribbon at the hot state and large size platen can be used with this thermal head and is best suitable for the packaging printer market which requires the continuous print at high speed.

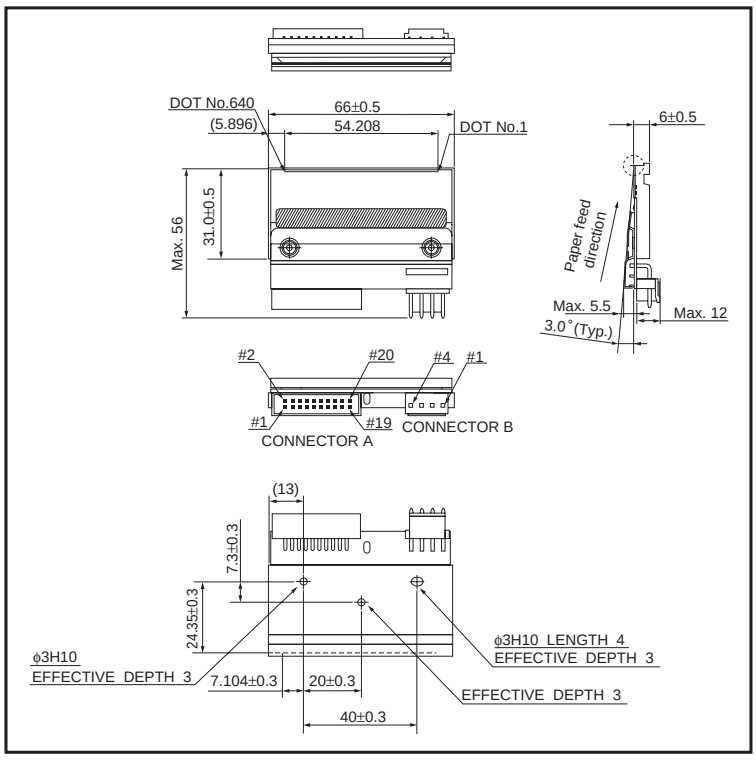
●Applications

Barcode label printers
Packaging printers
Ticket printers
General purpose portable printers

●Features

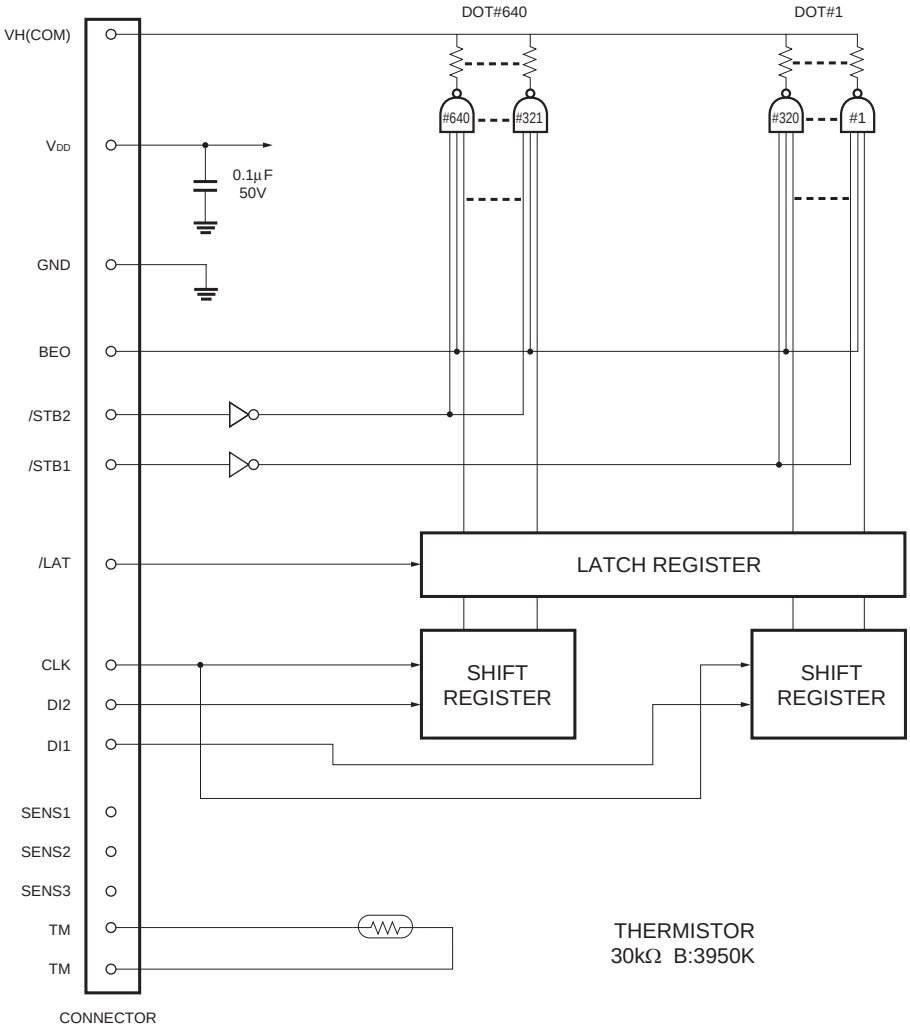
1) ROHM unique “STEP FREE” structure contributes to better anti-corrosion characteristics, less scratch break down, and better heat efficiency.
2) Thermal head contacts with the media by angle at the print, so that good print quality can be obtained for the thick media.
3) It has good anti-ESD characteristic by applying hard, conductive layer as the heat element protective coating.
4) Mounting space can be minimized, which contributes to the downsizing of the printer.

●Dimensions (Unit : mm)



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●Equivalent circuit



DI No.	DOT No.
DI2	640 to 321
DI1	320 to 1

STB No.	DOT No.
/STB 2	640 to 321
/STB 1	320 to 1

●Pin configuration

HIROSE

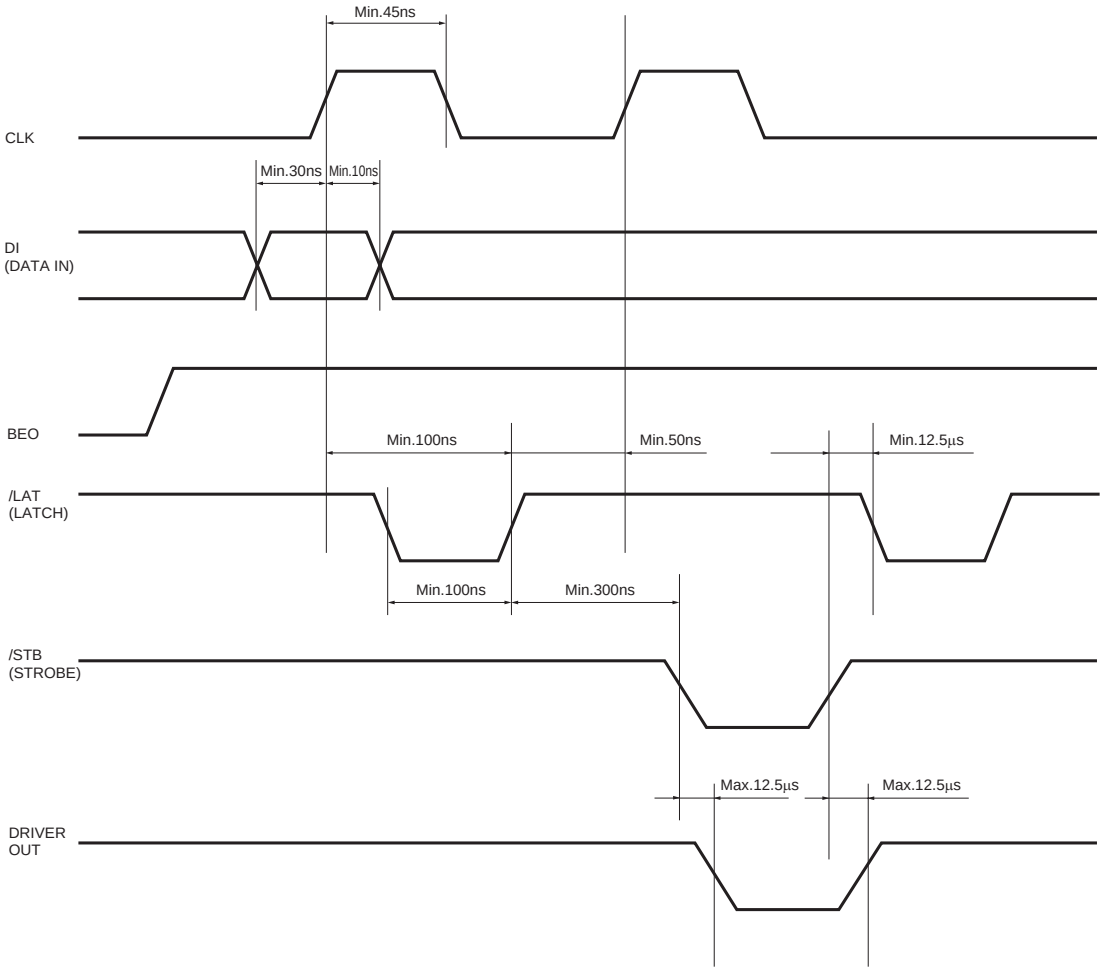
No.	Circuit	No.	Circuit
1	V_{DD}	2	BEO
3	GND	4	DI2
5	N.C.	6	CLK
7	$\overline{LAT}$	8	N.C.
9	N.C.	10	DI1
11	N.C.	12	GND
13	V_{DD}	14	$\overline{STB2}$
15	$\overline{STB1}$	16	TM
17	TM	18	SENS1
19	SENS2	20	SENS3

JST

No.	Circuit
1	VH
2	VH
3	GND
4	GND

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●Timing chart



●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	54.208	mm
Dot pitch	–	0.0847	mm
Total dot number	–	640	dots
Average resistance value	Rave	850	Ω
Applied voltage	V_H	24	V
Applied power	P_O	0.59	W / dot
Print cycle	SLT	0.28	ms
Maximum number of dots energized simultaneously	–	640	dots
Maximum clock frequency	–	10	MHz
Maximum roller diameter	–	ϕ50	mm
Running life / pulse life	–	150 / $1x10^8$	km / pulses
Operating temperature	–	5 to 45	°C

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www.rohm.com

Contact us : webmaster@rohm.co.jp

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ROHM Co.,Ltd. 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585, Japan
TEL : +81-75-311-2121
FAX : +81-75-315-0172

ROHM SEMICONDUCTOR