

High speed thermal printhead (300 dots / inch)

SE3002-DC90A

High speed, high quality, and high durability are achieved by using step free structure with high performance partial glaze and highly conductive overcoat layer. SE300*-DC90A series are lined up which can accommodate with all types of barcode labeling printers from Direct to Thermal Transfer, normal to high speed (over 300mm/s).

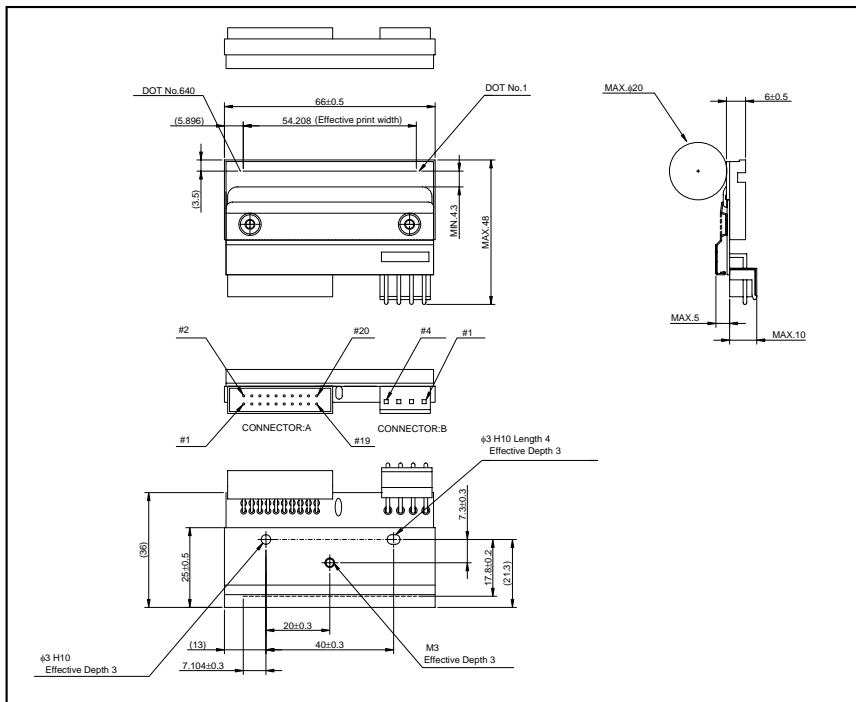
●Applications

Bar code printer
Label printer
Packaging printer
ATM
Ticket printer

●Features

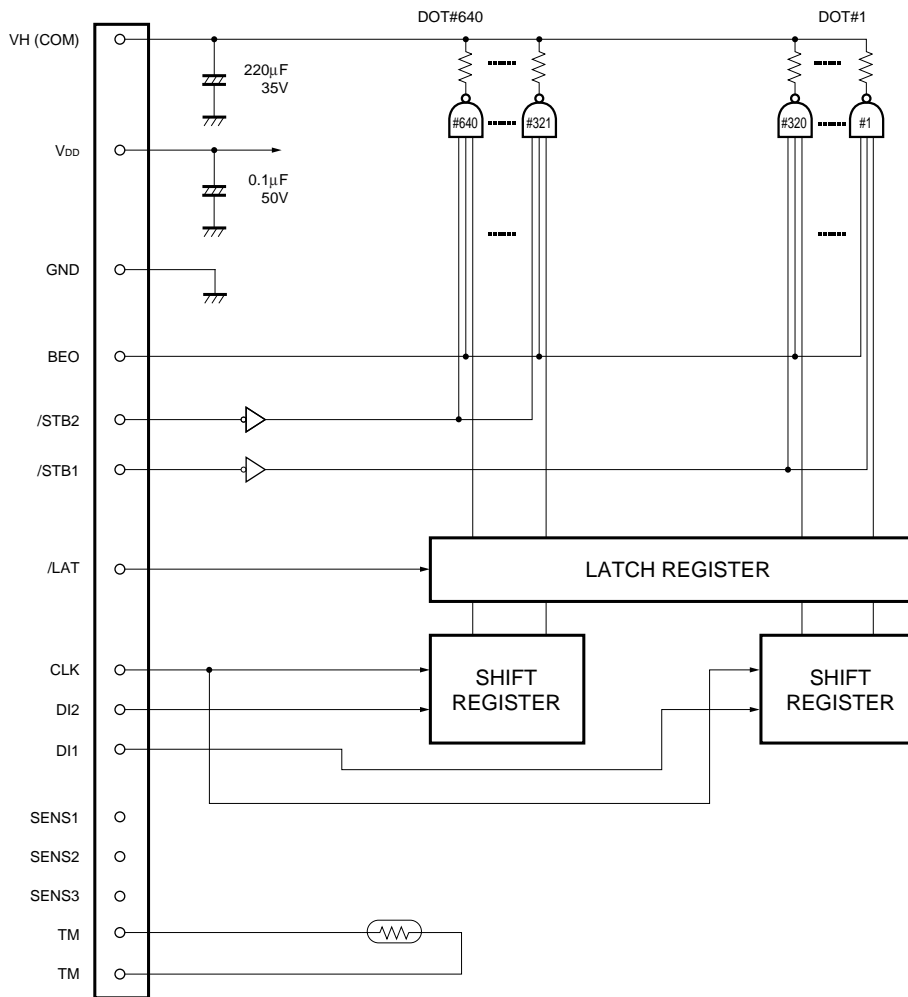
- 1) ROHM new technology "STEP FREE" structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
- 2) Standard glazed components to accommodate thick paper.
- 3) High speed clock to facilitate external heat history control.
- 4) Using a hard conductive film as a protective film on the heating element offers excellent resistance to electrostatic damage.

●External dimensions (Unit : mm)



Note : No heat history control function inside the thermal printhead. External heat history control is required for high speed printing.

●Equivalent circuit



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

$\overline{\text{STB}}$ No.	DOT No.
$\overline{\text{STB2}}$	640 to 321
$\overline{\text{STB1}}$	320 to 1

●Pin assignments

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

●Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width	–	54.2	mm
Dot pitch	–	0.0847	mm
Total dot number	–	640	dots
Average resistance value	R _{ave}	850	Ω
Applied voltage	V _H	24	V
Applied power	P _O	0.59	W / dot
Print cycle	SLT	0.42	ms
Maximum number of dots energized simultaneously	–	640	dots
Maximum clock frequency	–	8	MHz
Maximum roller diameter	–	φ20	mm
Running life / pulse life	–	150 / 10 ⁸	km / pulses
Operating temperature	–	5 to 45	°C

Notes

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