High speed thermal printhead (300 dots / inch) **SE3003-DC94A**

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*-DC94A 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).

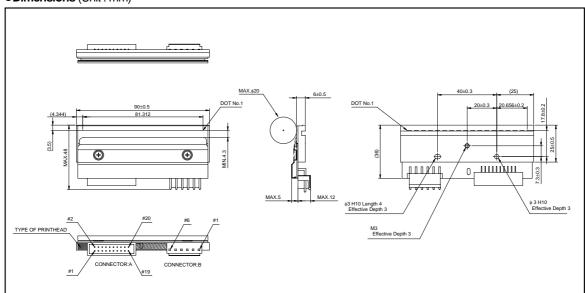
Implementation of ROHM Unique technology, Anti Sticking Treatment, reduces sticking problems (print skip at media feed direction) under the tough print conditions at low print speed, using label media with over coated.

Applications

Barcode printers Label printers Packaging printers ATM Ticket printers Scale printers

Features

- 1) Anti Sticking Treatment reduces sticking problems and achieves high print quality at any environmental conditions.
- 2) ROHM new technology "STEP FREE" structure will provide, high corrosion resistance, better resistance against scratching damage, high efficiency.
- 3) Standard glazed components to accommodate thick paper.
- 4) Using a hard conductive film as a protective film on the heating element offers excellent resistance to electrostatic damage.



•Dimensions (Unit : mm)

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



Printhead

•Equivalent circuit DOT#960 DOT#1 VH (COM) 0-Ş Ş Ş Ċ #960 #449 #448 #1 Vdd 0-0.1μF 50V \pm GND 0 ᆂ BEO 0-STB2 ->>> 0-STB1 \triangleright 0-LATCH REGISTER LAT 0-CLK 0-SHIFT SHIFT DI2 0-REGISTER REGISTER DI1 0-SENS1 0 SENS2 0 SENS3 0 0-ΤМ 0 ТΜ CONNECTOR

DI No.	DOT No.	STB No.	DOT No.	
DI 2	960 to 449	STB2	960 to 449	
DI 1	448 to 1	STB1	448 to 1	



SE3003-DC94A

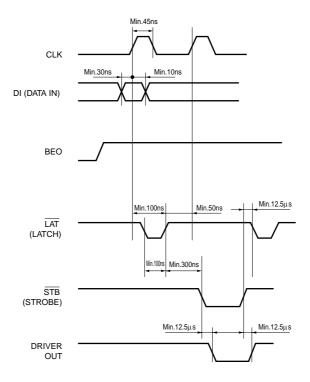
Printhead

•Pin assignments

HIROSE						
No.	Circuit	No.	Circuit			
1	Vdd	2	BEO			
3	GND	4	DI2			
5	N.C.	6	CLK			
7	LAT	8	GND			
9	GND	10	DI1			
11	N.C.	12	GND			
13	Vdd	14	STB2			
15	STB1	16	ТМ			
17	ТМ	18	SENS1			
19	SENS2	20	SENS3			

Circuit		
VH		
VH		
VH		
GND		
GND		
GND		

Timing chart



Printhead

Characteristics

Parameter	Symbol	Typical	Unit
Effective printing width		81.3	mm
Dot pitch		0.0847	mm
Total dot number	-	960	dots
Average resistance value	Rave	850	Ω
Applied voltage	V _H	24	V
Applied power	Po	0.61	W / dot
Print cycle	SLT	0.42	ms
Maximum number of dots energized simultaneously	-	960	dots
Maximum clock frequency	-	10	MHz
Maximum roller diameter	_	φ 2 0	mm
Running life / pulse life	-	150 / 10 ⁸	km / pulses
Operating temperature	_	5 to 45	°C



Notes

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