### **Printheads**

# High speed thermal printhead (with thermal historical control)

# SE2003-DC70A

High speed, high quality, and high durability are achieved by using step free structure with high performance partial glaze and highly conductive overcoat layer. SE200\*-DC70A 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).

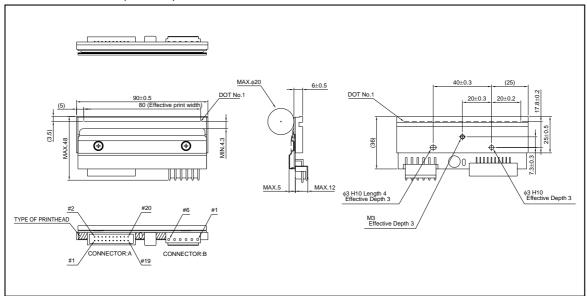
#### Applications

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) High-hardness protect cote type "W-coat" is employed with 150km abrasion life-time.
- 3) A built in history-control functionality, high-speed printing up to 300mm / s can be achieved at 300dpi with clear print image.

# ●External dimensions (Unit: mm)



# ●Equivalent circuit DOT #640 DOT #1 Vн (COM) 220μF 35V GND V<sub>DD</sub> (+5) / STB2 / STB1 BEO / RESET LATCH REGISTER SHIFT REGISTER SHIFT REGISTER CLK (CP) DI2 DI1 / LOAD START TO EACH IC INC SEL2

DI No.	DOT No.		
DI2	640 to 257		
DI1	256 to 1		

/ STB No.	DOT No.		
/ STB2	640 to 257		
/ STB1	256 to 1		

 $\Leftrightarrow$ 

THERMISTOR 30kΩ B: 3950K

# Pin assignments

### CONNECTOR: A

SEL1 TM

ТМ

3323.3						
No.	Circuit	No.	Circuit			
1	V <sub>DD</sub>	2	BEO			
3	GND	4	DI2			
5	GND	6	CLK (CP)			
7	/LOAD	8	START			
9	INC	10	DI1			
11	SEL2	12	SEL1			
13	/RESET	14	/STB2			
15	/STB1	16	TM			
17	TM	18	SENS1			
19	SENS2	20	SENS3			

# CONNECTOR: B

No.	Circuit	No.	Circuit	
1	VH (COM)	2	VH (COM)	
3	VH (COM)	4	GND	
5	GND	6	GND	

# Printheads

# Characteristics

Parameter		Typical	Unit
Effective printing width	-	80	mm
Dot pitch	-	0.125	mm
Total dot number	-	640	dots
Average resistance value	Rave	550	Ω
Applied voltage	Vн	24	V
Applied power	Po	0.85	W/dot
Print cycle	SLT	0.49	ms
Maximum number of dots energized simultaneously	_	640	dots
Maximum clock frequency	_	8	MHz
Maximum roller diameter	_	ф20	mm
Running life / pulse life	_	150/(1×10 <sup>8</sup> )	km/pulses
Operating temperature	-	5 to 45	°C



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