

Monochrome image sensor head (300 dpi)

IA3008-MB10A

The IA3008-MB10A is a state-of-the-art compact, lightweight image sensor head that resulted from the combination of ROHM's LSI circuit technology and thermal printhead mounting technology. The IA3008-MB10A is perfect for multi-function printers (MFP) or facsimiles that print on normal paper using laser units.

●Applications

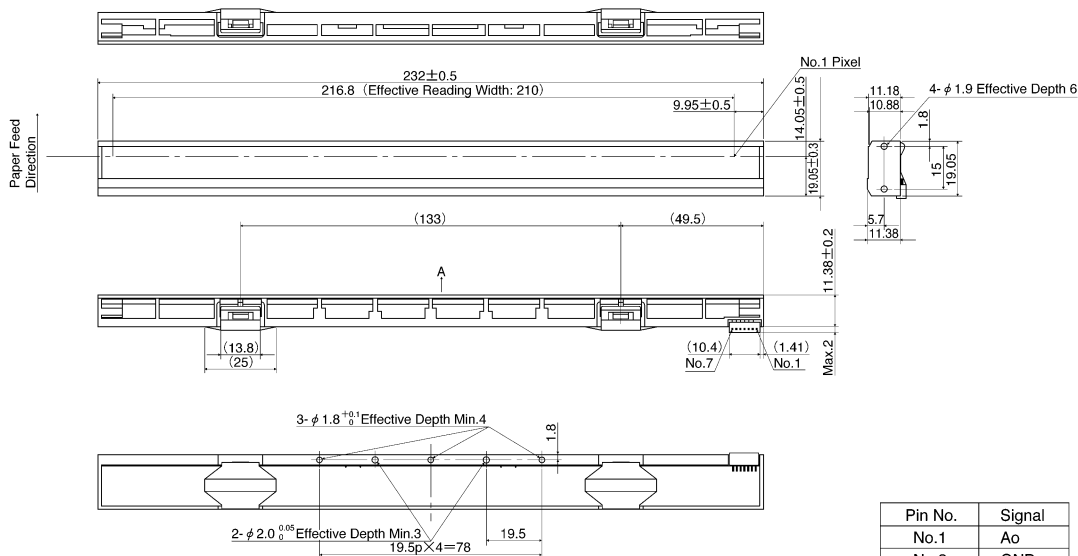
Facsimiles

Image scanning devices

●Features

- 1) The amplifiers, resistors, capacitors, and other discrete components that were normally externally attached, are built into the sensor IC.
- 2) Compact body and lightweight achieved by the placement of the LED light source and sensor IC on the same board.
- 3) Uses a special flame that provides superior light gathering characteristics and uniform light dispersion.
- 4) Uses a ceramic board as the base board for minimal temperature fluctuations and uniform thermal dispersion.

●External dimensions (Units: mm)



Deflection of glass surface: With the A-direction positive, 0~0.22 with respect to the cover glass.

Connector: IL-Z-7P-CLIP (JAE)

Socket Housing: IL-Z-7S-125C3 (JAE)

Socket Contact: IL-Z-C3-15000 (JAE)

Pin No.	Signal
No.1	Ao
No.2	GND
No.3	V _{DD}
No.4	SI
No.5	CLK
No.6	GLED
No.7	VLED

● Characteristics

Parameter	Symbol	Typ.	Unit
Effective scanning width	—	210	mm
Primary scan dot density	—	300	DPI
Total dot number	—	2560	dots
Power supply voltage	V _{DD}	5	V
Scanning speed	SLT	2.5	ms / line
Clock frequency	CLK	1.5	MHz
Maximum dynamic range	VR Max.	2.4	V
Minimum dynamic range	VR Min.	V _R Max. × 1.5	V
Dark output	V _{od}	0.6~1.8	mV
Operating temperature	—	5~45	°C

● Pin assignments

No.	Circuit	I / O	Functions
1	A _o	O	Analog output
2	GND	I	Ground
3	V _{DD}	I	Power supply
4	SI	I	Serial-in
5	CLK	I	Clock
6	GLE _D	I	LED ground
7	VLE _D	I	LED power supply

● Timing chart

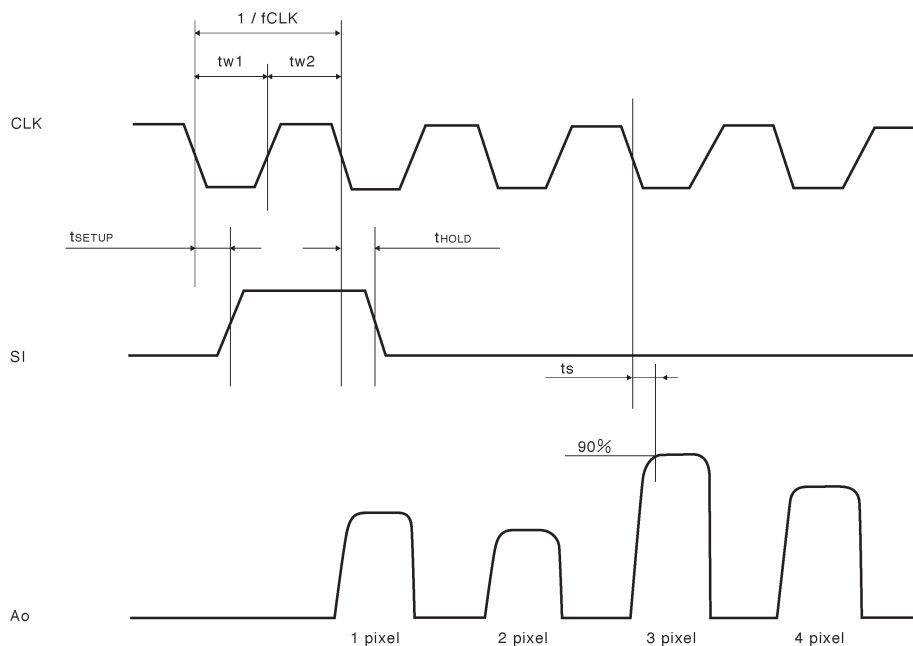


Fig.1

● Equivalent circuit

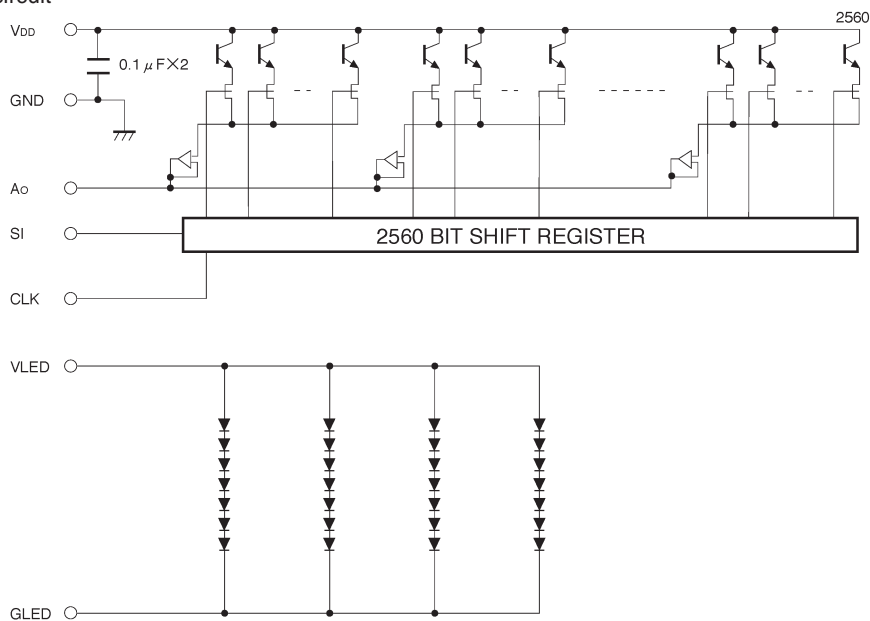


Fig.2