

Monochrome image sensor head (8 pixel / mm)

IA2008-MB10A

The IA2008-MB10A is a state-of-the-art compact, lightweight A4-size monochrome image sensor head that resulted from the combination of ROHM's LSI circuit technology and thermal printhead mounting technology.

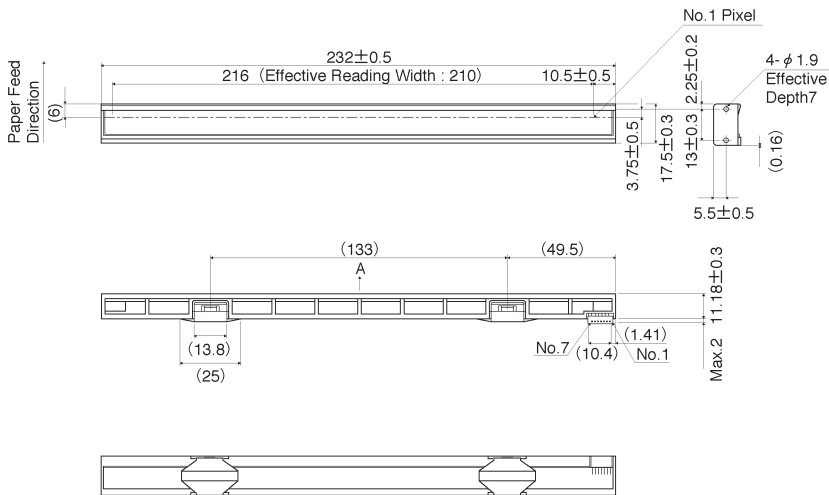
●Applications

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 ROHM developed prism 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)



PIN No.	SIGNAL
No.1	Ao
No.2	GND
No.3	V _{DD}
No.4	SI
No.5	CLK
No.6	GLD
No.7	VLED

- Notes:
1. Curvature of glass surface: With the A-direction positive, 0 to 0.22 with respect to the cover glass.
 2. The frame material is UL94V-0.
(Connector part number)
Socket Housing : IL-Z-7S-S125C3 (JAE)
Socket Contact : IL-Z-C3-A-15000 (JAE)

●Characteristics

Parameter	Symbol	Typ.	Unit
Effective scanning width	—	210	mm
Primary scan dot density	—	8	pixel / mm
Total dot number	—	1728	dots
Power supply voltage	V _{DD}	5	V
Scanning speed	SLT	5	ms / line
Clock frequency	CLK	500	kHz
Maximum dynamic range	VRMax.	1.6	V
Minimum dynamic range	VRMin.	0.84	V
Dark output	V _{od}	0~300	mV
Operating temperature	—	5~45	°C

●Pin assignments

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

●Timing chart

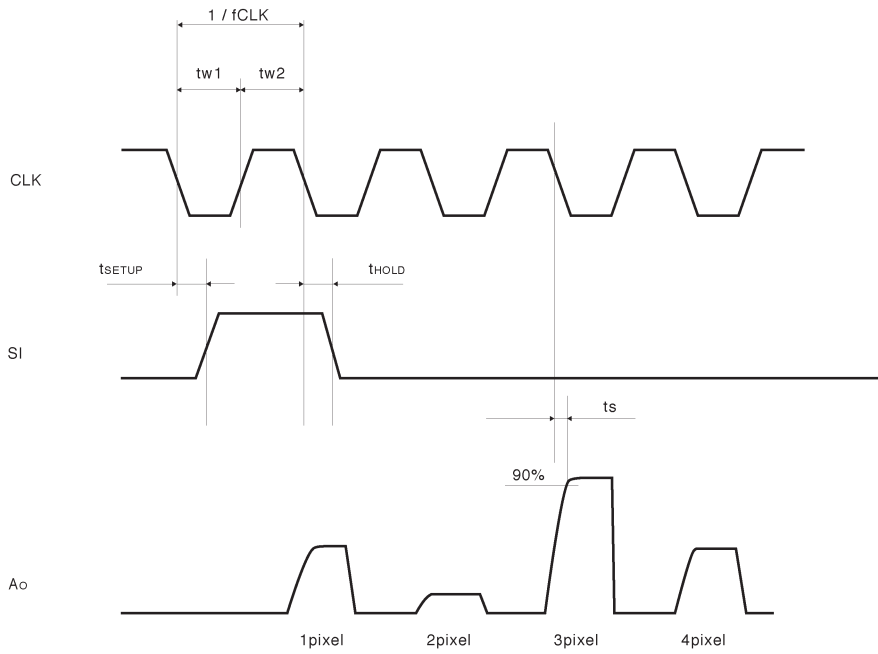


Fig.1

●Equivalent circuit

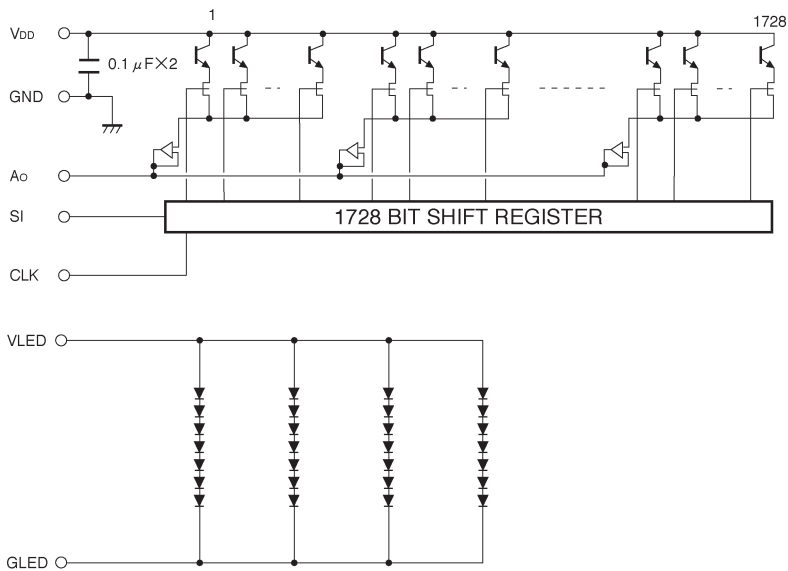


Fig.2